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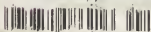
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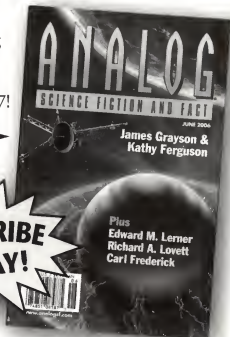
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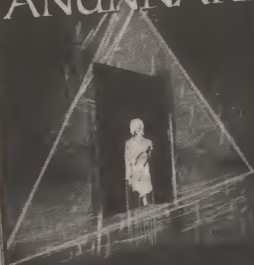
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## A SECOND-HAND SENSIBILITY

There's this dream I used to have, when I was a teenager. It's not an uncommon dream, maybe even you yourself have had something like it. In it, I walk into a vast bookstore; shelves extend beyond the horizon line—a Jorge Luis Borges or artist François Schuiten kind of shop, decorated with rococo woodwork, tons of curling brass, ladders that slide along an eternal track near the ceiling (in my dream, the ceiling is the sky). And, of course, on the shelves, all the books I'd ever wanted to read, all waiting to be taken to a Borgesian cash register (perhaps one pays in shells or sand), and then home to become part of my own library. At that time in my life, the dream shop would have contained the complete works of Moorcock and Ellison, Simak and Burroughs, all in paperback size (even in my dreams, hardcovers were well beyond my means).

In today's world of instant-gratification internet auction-houses and book dealers, this dream must seem quaint and unnecessary. But, for a young kid growing up in the eighties and early nineties, it was an intoxicating fantasy, since most of the works by the authors named above were completely out of print and unavailable to me or anybody else. Certainly, a copy of *Dune* or *Foundation and Empire* or *The Demolished Man* could be found at any shopping mall bookstore, but what were you to do when these few classic titles were exhausted and you wanted more? When the lo-

cal library discounted science fiction as juvenile and thus only carried a few age-appropriate Heinlein and Bradbury titles?

The answer was simple: used-book stores. Becoming a reasonably well-read SF reader was no hard task, as the best known books had always remained in print. It was the more developed reader who ran into problems: how to discover Sturgeon? Or Lafferty? There was only one way, and that was to root around, a little teenaged pig hunting for paper truffles, in the mold-ering stacks of used-book stores. It was in those stacks that I discovered my favorite of the largely forgotten (for my generation, at least) writers of classic SF: Jack Vance.

A quick glance at *JackVance.com* reveals that his masterwork, *The Dying Earth*, was completely lost as an in-print US paperback between the years 1986 and 2000. Unavailable for fourteen years! If you had the great luck to find it used during those years (and when I found it, as Robert Silverberg writes about it in this month's Reflections column, I knew that I had to have it), and recognize it as a classic, you could look forward to future dreams of Borgesian bookshops featuring all the Greatest Works of Jack Vance, most of which were unavailable in anything other than costly small-press editions. Those who enjoyed *The Dying Earth* for the great poetic and mysterious masterpiece that it is would most certainly want to explore the

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many other worlds of Vance—perhaps Big Planet or the Gaeian Reach? It was so for me. I leaped to the world of *The Last Castle* via interlibrary loan, and crashed upon the steppes of the Planet of Adventure with Adam Reith—a setting I have always equated subconsciously with Henryk Sienkiewicz’s historical adventures upon the plains of Poland, which I read the same year. But it was always a vigorous hunt to find the next Vance book, in those days before *Abebooks.com* and eBay, when old books were gloriously fallen upon, found by pure chance and, perhaps, fate.

Imagine my delight, after years of collecting Vance in drips and drabs, when I discovered the Vance Integral Library <[www.vanceintegral.com](http://www.vanceintegral.com)> in 1999—a volunteer-run project devoted to producing “a complete and correct edition, in forty-four volumes” of Vance’s entire oeuvre. Forty-four volumes! Everything. That year, I knew I could not afford to purchase the whole collection, which was printed privately at considerable expense, but I *had* to be involved in whatever minor capacity I could muster. I signed up to proofread Vance texts in my spare time, a job I enjoyed, though I did not always have the opportunity to proof Vance’s best.

The VIE’s purpose was elegant: “the proper presentation and preservation of Vance’s work” so that it “may . . . be conveniently assessed.” That future assessment may feature wildly divergent opinions as to whether Vance is or is not literature, or, even whether his work is or is not science fiction—even the editors and volunteers of the VIE itself could not always agree on these points in their own newsletter. (I love when SF is not

considered “literature”—the used-book-store owners price their stock accordingly.) At the project’s core, and beyond all critical appraisal, Vance’s work is now available to be accessed in its purest and least tampered-with form, in a truly beautiful edition meant to last several lifetimes. Though scheduling conflicts forced me to leave the project when I accepted the job at *Asimov’s*, I was proud to have helped with this effort.

My set of the VIE—purchased online in 2006, some time after its original publication—represents to me a secretive nod to that Borgeian dream-bookshop of my youth. The next best thing, used-book shops were places where chance and randomness and instinct unwittingly collided to create my tastes and sensibilities in the fiction I love. Without these places, stores separate from the consumer economics of larger chain bookshops and the ephemeral trends of the day’s literati, I would never have had the opportunity to discover Poul Anderson’s classic novels, Cordwainer Smith’s *Norstrilia*, or scores of other books and stories that are as integral a part of my intellectual tapestry as most of the Vance Integral Library remains. It seems to me that this constant recycling of artifacts is crucial to the development of new science fiction aficionados, and I hope that my library, painstakingly cobbled together over many years, will one day disseminate to the next generations of SF readers, becoming the currency paid that will keep the genre alive forever. ○

*Brian Bieniowski is the associate editor of Asimov’s Science Fiction magazine.*





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## REREADING JACK VANCE

I confess I haven't been reading much science fiction in recent years. It isn't that I've lost interest in it, exactly. But life is finite, the supply of books to read is well-nigh infinite, and one has to keep that disparity in mind when making one's reading selections. About a decade ago, as I was entering my sixties, I realized that although I had read an immense number of SF novels, I had never read Gibbon's *Decline and Fall of the Roman Empire* or Tolstoy's *War and Peace*. Reading science fiction has given me much pleasure over the years, but maybe, I thought, the time has come to clear some space in the reading schedule for Gibbon and Tolstoy instead of reaching for that new Gregory Benford novel.

So I read Gibbon. I read Tolstoy. Those are *big* books, and gobbled up months of reading time, and very rewarding reading they were, too. And so it has gone ever since—it became time to read or reread Thucydides, or Carlyle's *The French Revolution*, or Ovid's *Metamorphoses*, and SF kept getting pushed to one side. Suddenly, though, I'm hungry for tales of space and time again. But despite what I said above about finite reading time and infinite numbers of books to choose from, I've begun rereading the great science fiction books of my youth, re-experiencing them from the other end of life, and I'm going to talk about those books and my modern-day feelings about them in several columns this year.

\* \* \*

I started with Jack Vance's *The Dying Earth*, a book I've read and reread any number of times since it first appeared in 1950, and which, apparently, I never tire of reading.

I still have my original copy of the book, and there's a story connected with it. The fall of 1950 saw the arrival of *Worlds Beyond*, a new SF magazine edited by Damon Knight. On the back cover of the first issue was an ad for *The Dying Earth*, a novel by Jack Vance, which was described in these words:

Time had worn out the sun, and Earth was spinning quickly toward eternal darkness. In the forests strange animals hid behind twisted trees, plotting death; in the cities men made constant revel and sought sorcery to cheat the dying world. . . .

I had to have it. Not only was I particularly fond of Vance's soaring imagination and voluptuous prose, but the novel of the far future had had special appeal to me ever since my discovery of H.G. Wells's *The Time Machine* when I was about ten. Finding it, though, was not so simple. This was the era of the Korean War paper shortages, and Hillman Publications, the publishers of *Worlds Beyond* and the paperback series that included *The Dying Earth*, had swiftly killed both the magazine and the

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paperback line. *The Dying Earth's* first edition became an instant rarity, and only through luck was I able to find a copy.

I confess my younger self was disappointed at first. It wasn't a novel, I quickly discovered, just six loosely related tales with a common background and a few overlapping characters. (Mysteriously, the first two chapters were reversed in that edition, so that the central character of the opening section was a woman not created until Chapter Two.) And all the sorcery bothered me, the demons and wizards and other such Arabian Nights filigree. What I wanted then was scientific verisimilitude and technological razzle-dazzle, a literal revelation of time to come, not magic. (Arthur Clarke had not yet coined his famous dictum about how hard it is

to tell science and magic apart in a technologically advanced society.)

So at the age of fifteen I failed fully to appreciate *The Dying Earth* because I had asked it to be that which it was not. Still, I admired the music of the prose and the elegance of the wit, the cunning of the characters and the subtlety of human interaction. And when I read it again, five years or so later, I could forgive it for not being hard-edged SF and I began to love it for its own sake. I've reread it every ten or fifteen years since, always with immense pleasure.

Now, after a gap of some twenty years, I have read it yet again, and I was delighted to find that it still sings to me. I still love the sly malevolent characters, the beautiful prose, the cunning plotting. The

sorcery element bothers me not at all: the workings of Vance's wizards' spells are inexplicable to me, but so, too, are the workings of the modem that brings me the incredible richness of the Internet every morning.

The names of characters, how magical: Pandelume of Embelyon, Prince Kandive the Golden, Thrang the ghoulish-bear, Rogol Domedonfors, and—especially—Chun the Unavoidable! The Deodands, the Twk-men, the Gauns. And the place-names: Grand Motholam, the river Scaum, the Ide of Kauchique, the lost city of Ampridatvir!

The names of spells: the Excellent Prismatic Spray, Phandaal's Gyra-tor, the Expansible Egg, the Omnipotent Sphere, the Spell of the Slow Hour, the Mantle of Stealth, the Call to the Violent Cloud.

An essay by the late scholar of fantasy Lin Carter notes that Sam Merwin, who edited the SF magazines *Startling Stories* and *Thrilling Wonder Stories* in the 1940s, read and rejected "fascinating, but, alas, unpublishable pseudo-Cabellian fantasies" by Vance during the war years before purchasing, in 1945, "The World-Thinker," Vance's first commercially published story. Carter assumes, correctly, I think, that these "pseudo-Cabellian fantasies" were the six *Dying Earth* tales that eventually became that ephemeral 1950 Hillman paperback. If so, it means that Vance (who was born in 1916) was in his twenties when he wrote them. This is remarkably accomplished prose for a writer in his twenties—for any writer, indeed.

That there is a strong flavor of James Branch Cabell in Vance's

style is beyond question. Consider this, from Cabell's *Jurgen*:

"All this," said Jurgen, "seems regrettable, but not strikingly explicit. I have a heart and a half to serve you, sir, with not seven-eighths of a notion of what you want of me. Come, put a name to it!"

But I see the influence of Lord Dunsany here too, and several critics have convincingly shown the impact of Clark Ashton Smith's fantasies and John Ruskin's writings on painting and architecture on Vance's style. About 1964 I asked Vance about the literary antecedents of *The Dying Earth*, specifically citing Dunsany, and he brushed the question aside so effectively that I never raised it again with him.

His use of color: how wonderful!

Most strange, however, was the sky, a mesh of vast ripples and cross-ripples, and these refracted a thousand shafts of colored light, rays which in mid-air wove wondrous laces, rainbow nets, in all the jewel hues. So as Turjan watched, there swept over him beams of claret, topaz, rich violent, radiant green. He now perceived that the colors of the flowers and the trees were but fleeting functions of the sky, for now the flowers were of salmon tint, and the trees a dreaming purple. The flowers deepened to copper, then with a suffusion of crimson, warmed through maroon to scarlet, and the trees had become sea-blue.

The courtly dialog:

"Willingly will I aid you,"

\* \* \*

said Pandelume. "There is, however, another aspect involved. The universe is meth-odized by symmetry and balance; in every aspect of existence is this equipoise observed. Consequently, even in the trivial scope of our dealings, this equivalence must be maintained, thus and thus. I agree to assist you; in return, you perform a service of equal value to me. When you have completed this small work, I will instruct and guide you to your complete satisfaction."

The sardonic wit, as in this passage, which seems a foreshadowing of the sort of answers one gets from computer support lines today:

"I respond to three questions," stated the augur. "For twenty terces I phrase the answer in clear and actionable language; for ten I use the language of cant, which occasionally admits of ambiguity; for five, I speak to a parable which you must interpret as you will; and for one terce, I babble in an unknown tongue."

The dying Earth itself, so vividly evoked:

A dim place, ancient beyond knowledge. Once it was a tall world of cloudy mountains and bright rivers, and the sun was a white blazing ball. Ages of rain and wind have beaten and rounded the granite, and the sun is feeble and red. The continents have sunk and risen. A million cities have lifted towers, have fallen to dust. In place of the old peoples a few thousand strange souls live. . . .

Over six decades it has lost nothing for me; gained in power, perhaps. The characters are sharply delineated. Each section sets forth a challenging plot problem and ingeniously resolves it. Its prose is measured, taut, controlled, mesmer-ic. One reads carefully, trying not to let the imperatives of the plots rush one forward, because one is fearful of skimming past some passage of wondrous beauty. And the reward is the vision of a complete world of the imagination, irresistible, unforgettable. ○

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## ME AND DEKE AND THE PARADIGM SHIFT

*Michael Cassutt lives in Los Angeles and has written extensively for television (e.g., Max Headroom, Eerie, Indiana, and The Dead Zone). Mike is also the author of a pair of SF-fantasy novels and numerous short stories. His last tale for Asimov's, "Generation Zero," appeared in our October/November 1996 issue. In addition, Mike has published non-fiction and fiction about the space program. He is currently working on a new novel and a new non-fiction project.*

So I popped open a can of Labatt's Blue and said to Deke Slayton, "Deke, old buddy, what was it like being part of that big old Paradigm Shift back in the 1960s?" We were sitting on lawn chairs outside an R.V. parked in front of a hangar at the Reno Air Races. Scott Grissom, Gus's son, was there, too, helping push Deke's Formula One airplane, a Williams 17, out of the hangar. Gordo Cooper had just driven by on his way to the viewing stands; he hadn't stopped to say hello, but maybe he hadn't seen Deke. Or maybe he'd heard the words "Paradigm Shift" floating in the air and decided to be elsewhere.

Or am I thinking of Tom Stafford at the Cape? No, it was Deke who liked Canadian beer and flew Formula One in retirement. On the other hand, you could say "Paradigm Shift" to General Tom without getting one of *those* looks in return.

Either way, this scene of a laid-back, rat-shack-style encounter with the guys who flew Mercury, Gemini,

and Apollo is not solely an attempt to drive Allen Steele green with envy . . . it's to establish my bona fides. To make you trust me as we consider that moment when sending human beings into space ceased to be Buck Rogers craziness and became the real deal or the Right Stuff.

Also known as the Paradigm Shift.

Without really intending to, I have become an expert on America's astronauts. I have co-authored two autobiographies (Slayton's and Stafford's), written the biographical encyclopedia *Who's Who in Space* (three editions, none of them short) as well as contributing odd bits of journalism and even historical papers. Oh, yes, there are the three novels dealing with manned space flight—*Missing Man* and its sequel, *Tango Midnight*, and *Red Moon*.

In thirty years of . . . well, in Hollywood we'd call it schmoozing . . . I have met, and, in some cases, talked at length, with eighteen of the twenty-two surviving members of the first three groups of NASA astronauts, as well as an untold number of those who followed, not to mention a good dozen Soviet cosmonauts from that era.

Tom Stafford wanted to title his autobiography *Higher and Faster*; mine would probably be *Closer and More Personal*.

Why this obsession? I was a total child of the Space Age. My first book was *Tom Corbett, Space Cadet*—not the first of the Grosset & Dunlap novel series by "Carey Rockwell," but a picture book. Nevertheless, it

launched me as a consumer of science fiction, especially SF about rocketships and flights to other planets. Further damage was done by the Winston series of juveniles by Lester del Rey (under a variety of names), Andre Norton's books, and, of course, Robert A. Heinlein's Scribner novels.

It was my mother who introduced me to the Heinleins, unquestionably the stories most associated with the Paradigm Shift. She was an English teacher at John Glenn Junior High School in Maplewood, Minnesota. After Glenn's Mercury flight in February 1962, it was the first facility named for him. One wintry Friday in 1965 she brought me *Red Planet*. Reading it, at age ten, was the closest I will ever come to a transcendent experience. Heinlein's portrayal of colonial life on Mars was so real, so engaging, that it struck me as *more* realistic than *Tom Sawyer* or *Robinson Crusoe*.

On each of the next nine Fridays, she brought me a new book in the series, from *The Star Beast* to *Tunnel in the Sky* to the wonderful *Have Space Suit, Will Travel*. (For some reason, the library didn't have *Starman Jones*—I didn't read it until I found a paperback edition a couple of years later.)

Inspired, I began to collect astronaut stories from *Life* magazine and other publications. I built lunar module and Gemini and Saturn V Revell models. (Well, unlike Allen Steele, I never actually *finished* that monster Saturn V.) Having seen the fictional side of space travel, I couldn't wait to see the reality.

Which was this:

It was almost forty-eight years ago that seven American military test pilots were put on stage in a house in downtown Washington,

D.C., and introduced to the press and the world as "America's Mercury astronauts." Not one of the first seven had any idea what was in store—they expected to be treated like Scott Crossfield or Capt. Bob White, the test pilots who had been chosen for the X-15 high-altitude research program a year earlier . . . fodder for a day's worth of newspaper articles, then fading back to happy obscurity while they got on with their jobs.

Not the Mercury Seven. From the day of that press conference, they became household names, as famous as movie stars or baseball players. People wanted their autographs, wanted them to pose for pictures, wanted to have drinks with them, wanted to have more personal encounters.

Scott Carpenter would later describe it as "more fun than you can imagine," but at another level, it made the men incredibly uncomfortable. As Deke told me, "We hadn't done anything but show up!"

That's what happens with Paradigm Shifts. You don't get to volunteer for them. You can't escape them. They roll over you like a cultural tsunami.

Prior to Project Mercury, which itself followed closely on Sputnik, space flight was equated with science fiction: Buck Rogers stuff, theoretically possible, but impractical, unlikely, unaffordable.

This attitude wasn't limited to middle-class Americans—President Eisenhower was extremely reluctant to commit the nation to a space program. (To be fair to Ike, this reluctance stemmed more from financial prudence than some lack of vision. He had a pretty good idea of what a space program would cost, and he simply didn't want to burden the next generation with huge bills . . . especially knowing that Cold War



military needs would force gigantic expenditures.)

Even SF writers like Robert A. Heinlein—author of those inspiring Scribner juveniles—could postulate a grim view of the inevitability of space flight when he wanted. His classic novella, “The Man Who Sold the Moon,” portrayed a near-future world in which “antipodal rockets” routinely made sub-orbital flights with cargo and passengers . . . while only one man showed any interest in actually flying to the Moon.

In stories like Ray Bradbury’s “R is for Rocket,” it was even suggested that being a “spaceman” was beyond the ability of ordinary humans, that likely prospects would have to be scouted and selected by mysterious great minds by the time they were twenty, or forget it.

The Mercury Seven changed that. They were recognizably the guys from down the next street, from the gas station downtown, or maybe the new junior college. Who could look at the freckled face of John Glenn and not see middle America? If he thought going into space was possible, then who was going to argue the point?

Yes, their lives had been formed by the Depression, by the rise of aviation (both Tom Stafford and Deke Slayton spoke reverently of the magic of standing in their front yards and watching aircraft fly overhead), and by World War II, Korea, and the Cold War. Some of them had become warriors, but, in 1961, so had many American men.

(And, yes, they were all white males. The race-and-gender Paradigm had yet to shift.)

Chosen in 1962, the second group of astronauts—which included Neil Armstrong, Frank Borman, Jim Lovell, Tom Stafford, and John Young—*did* have some idea of their

fate. For one thing, they knew they were going to fly missions in Apollo, a program intended to “land a man on the Moon by the end of this decade, and return him safely to Earth.”

Tom Stafford, who, on that September day in 1962, had the pleasure of being introduced to the press on his thirty-second birthday, says he looked around at the group as the flashbulbs popped, and thought, “One of us is going to be the first guy to walk on the Moon.” (Had history changed slightly, it would have been Stafford, not Armstrong. Had it changed even less, it would have been Borman, or McDivitt, or Conrad.)

In 1963, a third group arrived, chosen, like the first two, from the pool of skilled military and civilian jet pilots, all of them hardened by combat or risk, seemingly more interested in carburetors and cocktails than space medicine or the origin of the Moon.

But only on the surface. Deke admitted to me that even before he’d heard of the Mercury program, he would pick up the odd book or magazine on astronomy. Scott Carpenter grew fascinated by aerospace medicine. Tom Stafford was already a student at the Harvard Business School when NASA grabbed him. Jim Lovell actually built rockets and knew their history as well as anyone. Frank Borman and Jim McDivitt had studied aerospace engineering and helped found an Air Force program specializing in the subject.

Later waves of astronauts included genuine scientists, like Jack Schmitt or Ed Gibson, or men with wide-ranging intellectual curiosity that belied their images as test pilots.

Take Ed Mitchell, for example, the lunar module pilot on Al Shepard’s Apollo 14. If the average American can differentiate Mitchell from the other moon-walkers, it’s that he was



the guy who did E.S.P. experiments in space.

He was a Navy pilot who had taken part in tests of the delivery of nuclear weapons from jet aircraft, who had helped develop a manned spy satellite program.

And yet . . . he had a Ph.D., he had grown up in America's land-based Bermuda Triangle—the town of Roswell, New Mexico—where he a) witnessed the detonation of the first atomic bomb at Trinity as a bright light on the northern horizon one July morning in 1945, b) walked home from grade school past the residence of Robert H. Goddard, and c) knew the family whose farm was the location of the supposed “saucer” crash of 1947.

To this day, Mitchell writes and lectures eloquently on any number of subjects, speculative science that could easily be labeled SF.

Buzz Aldrin also had a Ph.D., and in recent years has worked tirelessly for the private space industry.

I suspect there was another flavor to the Paradigm Shift . . . that astronauts made it cool to be *smart*. They, and their short-sleeved, white-shirted, pocket-protected colleagues from engineering and mission control (who were also present at those raucous beach bashes) inspired the generation of computer geeks and nerds who currently rule the world from Seattle, San Jose, Bangalore, and Shanghai.

And yet . . . this Paradigm Shift is history. Apollo ended in 1972. As Gene Cernan jokes, with some bitterness, he thought he was the latest man on the Moon, not the last.

Deke and Al and Gus and Gordo are gone. Bill Gates and I are . . . well, we're middle-aged. And I can't claim to speak for him, but I often wonder if the vision of humanity's relentless, remorseless expansion

into the Solar System . . . the inevitability of white-suited figures raising a flag on the slopes of Olympus Mons, or gazing in wonder at mighty Jupiter from the icy surface of Europa . . . might not be wrong.

Was the Paradigm Shift personified by astronauts the right one?

Or did it send us into a technological cul-de-sac?

That's what I've heard over beers at beach parties at the Cape . . . at the viewing stand for a launch . . . at autograph shows . . . at charity dinners . . . at lunch in the Johnson Space Center cafeteria . . . standing in the cold on a street in Moscow . . . via letters, e-mails, phone calls, and plain old conversation.

I've listened to Deke's post-mortem on NASA's first major attempt to cut a clear pathway to the world of Heinlein's *Red Planet*—at least nine more lunar landings, orbital workshops, a Space Shuttle, and manned Mars mission in 1986. Proposed in August 1969, the program was dead on arrival, throttled in the crib. There was no money (the Vietnam War was then at its peak expense) and, worse yet, there was no clear mission—certainly nothing as clear as Kennedy's “man on the Moon by the end of the decade.”

Deke assigned astronauts who expected to fly Apollos 17 and 18, but had to tell them there was a good chance the missions would be canceled.

A second attempt to chart a path to Mars and the Solar System, the Space Exploration Initiative, was floated in 1989 . . . and crashed within months. There were numerous other studies on either side of that, including one headed by Tom Stafford. The results? Lots of paper, no hardware.

Now we are almost three years into a third program, the Vision for Space Exploration, which is already being squeezed by the Cold Equations of space flight.

The U.S. operates a Space Shuttle that is at the end of its design life, servicing an International Space Station that is, to put it charitably, under-used. Russia flies the fourth generation of its forty-year-old Soyuz—and very capably—but the vehicle is severely limited in terms of the amount of cargo it can carry.

China has dipped its toe into the piloted space business in the last few years, using their version of Soyuz. With two flights since October 2003 and a third not scheduled until the summer of 2008, it's a worthwhile program, but hardly ramping up for an assault on the Moon or Mars.

What is on the drawing boards? China talks of a bigger booster and a small manned orbiting station that would be the size of a single ISS module. Russia is looking for the money and will to construct Klipper, a scaled-down Shuttle.

And the U.S. has a program apparently known as Constellation (though you'd never know it from the increasingly confused NASA websites) with a Crew Exploration Vehicle (recently named "Orion") that has been described by no less an authority than NASA Administrator Michael Griffin as "Apollo on steroids."

Orion, will, it is hoped, allow us to duplicate the achievements of Apollo beginning in 2018, returning to the Moon for longer missions (up to a month) with larger crews (four) and more cargo.

All you need is a big new launch vehicle—the Ares I and V—which were supposed to use a lot of Shut-

tle-derived technology in order to save development time and money (which is actually the same thing). Just this past week NASA announced that instead of a Shuttle main engine, the Ares would use a Russian engine called the RS-68, originally designed in the 1960s. And that Ares's shape would change, because the plant that made the original Saturn V tankage was still available. Fine; it's not Shuttle-derived, it's derived from the 1960s.

The launcher and spacecraft are also supposed to serve as the core of future interplanetary vehicles, capable of making visits to Near Earth Objects or Mars.

This, by the way, follows an earlier decision by NASA to scrap a liquid oxygen-methane upper stage—a key element in any interplanetary vehicle—in order to get Constellation flying sooner, which is to say, more cheaply.

But will Orion/Ares be affordable as the aging Shuttle and unwanted ISS continue to eat up billions of tax dollars every year? It all depends on the American economy and the Federal budget. Look at the projections for Fiscal Year 2009 and get back to me.

Money isn't the only element in the Cold Equations. Space systems seem to grow more complex and unwieldy with every year. Do a Google search on military space programs like SBIRS or AEHF or FIA if you want to see just how little you can get for billions of tax dollars. The engine trade-offs made in CEV are only the beginning of what could be a long siege of technical . . . challenges.

Assuming the money and schedules work out, in success, where are we? Humans have proven that they can function in Earth orbit, though

anyone who can point to a commercial, medical, or technical breakthrough from the International Space Station should get in touch with NASA and let them know. The Apollo missions demonstrated our ability to get safely to and from the Moon.

Ah, but Mars? With current, non-nuclear propulsion on a mission that would have to last three years? At the moment, NASA medical specialists put the expected death rate from exposure to cosmic rays during such a mission at 5 percent. By comparison, workers in the radiation business face a 3 chance of dying.

While there will be no shortage of volunteers for a mission with those odds—which compare favorably to, say, those of Magellan's crews—I'm guessing that NASA will have a tough time getting funding for a vehicle that so blatantly violates OSHA standards. The technical fix? Add a few tons of shielding to the vehicle. Of course, that pretty much makes it impossibly heavy.

If the cosmic rays don't get you, other human factors might. Those are best simulated and studied on the International Space Station . . . the same facility that Mike Griffin wants to get out of.

And Mars is the easiest, most-Earthlike planet. To reach Europa, scale up the challenges accordingly.

Yes, the veterans of the Paradigm Shift have their doubts. There were those like Frank Borman, who years ago expressed skepticism about the claims of the Shuttle program, especially when it came to the fiction that the vehicle was safe enough to fly school teachers and politicians. There are others who will tell you quite frankly, over a beer or three, that no one is going to Mars any

time in the next twenty years, and possibly the next fifty or a hundred.

If you think there's something ironic in the idea of a man who saw the Earth from lunar orbit wondering if the trip was worthwhile—or even possible—well, life is full of ironies.

To be fair, not all former astronauts feel this way. Some, like Buzz Aldrin, are still busy trying to complete the Paradigm Shift—to make human or piloted space travel a reality.

Then there are those like Deke Slayton, who had grown quite disenchanted with NASA by the time he left in 1982, and became one of the pioneers of the Private Space business.

And, let's face it, a group of retirees is much less likely to be willing to take risks than the same men at the age of thirty.

The younger, Shuttle-era of astronauts, exposed to the same SF I was, remains hopeful. Scott "Doc" Horowitz, a Ph.D. who made four flights, now heads the space agency's Exploration Systems Directorate. Shuttle, Mir, and ISS veteran Mike Foale is still an active astronaut busy with, among other things, the design of a pressure suit that can be worn for launch and entries, and still used on lunar EVAs. Former Shuttle astronaut Franklin Chang-Diaz—seven missions!—has been working for years on a radical new propulsion system called Vasimr. I could name half a dozen more who have been members of the Mars Underground, a group of space professionals and enthusiasts using Robert Zubrin's concepts to further the cause of a flight to the Red Planet. Some of these astronauts played a direct role in shaping Orion/Ares.

No, the skepticism about the standard model as practiced by NASA is not uniform.

And there is an alternative. There is a growing, vibrant, raucous world of privately funded efforts effectively profiled in this magazine ("More than Halfway to Anywhere" by Joe Lazarro, March 2006).

I wish them luck, but my middle-aged sense of reality makes me afraid that some time around the year 2012 I'll be looking at Branson's Virgin Galactic sub-orbital tourist flights the same way one ex-employee looked at Grand Canyon Airways: "Their motto is, 'We don't crash all of them!'"

On a possibly brighter note, know that when I first went to college, I considered majoring in astronomy, either as a career or a way into the space program. It was, in fact, one of the reasons I chose the school I did.

Within a year I had given up the idea.

This was in the mid-1970s. All I missed were the Viking landings on Mars, the Voyager encounters with Jupiter, Saturn, and Neptune, the launch of the Hubble Space Telescope, and a dozen other platforms . . . call it the most fruitful and vibrant era of astronomical discovery in the history of the human race, a twenty-five year period when we learned more about the universe than we had in the previous hundred thousand years.

So it's *possible* I could be wrong about the ultimate success of private space.

Nevertheless, it's still a matter of putting human beings on top of rockets. That's the old paradigm.

Maybe it's time for a completely new one.

SF writer Greg Bear may have pointed the way. Years ago I heard him ask an audience at an SF convention if its members believed that

a century from now, humans would still look the way they do now.

"Of course!" "What else?" were the answers, proving that middle-aged SF fans are just as conservative as retired astronauts.

"You're wrong," Bear said, and in the general grumbling, managed to point out that developments in biomechanics, genetic engineering, and nano-technology were going to re-shape the human form. (Maybe it's just living and working in Hollywood, but every day I am confronted with proof that, given the tools, human beings will re-shape themselves.)

Why not imagine future astronauts being bio-engineered humans, as in Frederik Pohl's classic *Man Plus*? What about creating space probes that allow full-sensory links for operators back on earth, as in my own story "More Adventures on Other Planets"?

What about designing post-human astronauts in the womb? This sounds like a logical extrapolation of what Bradbury was writing about in "R is for Rocket" sixty years ago.

This is hardly a comprehensive list. And the ethical problems of womb-design are frightening.

Yet, I find this potential Paradigm Shift strangely hopeful . . . I wasn't likely to travel to the Moon, much less Mars. But some version of me—my avatar—might make it, and have a better time of it.

That's good enough for me.

And I owe it to my old buddy Deke to encourage it. ○

*AUTHOR'S NOTE: Allen Steele kindly consented to the use of his name. Check out the introduction to his fine collection, Rude Astronauts (Baltimore: Old Earth Books, 1993; New York: Ace, 1995).*

# OUTGOING

Alex Wilson

Alex Wilson is a writer, actor, and comic-strip creator from northern Ohio. Now settled in Carrboro, North Carolina, he runs the online audiobook project Tell-tale Weekly. Alex is a 2006 graduate of the Clarion writing workshop. "Outgoing," his tale of two unlikely astronauts headed for a fateful collision, is his first professional fiction sale.

## TEN: THE SIDEWALKSPHERE

Tara Jones was nine when her father warned her how she could break if she wasn't careful. He wasn't yelling, he said. He sounded like he was yelling. He wasn't angry, he said. He smelled like cigarettes.

On a Thursday afternoon, Tara and her best friend Caimile played marbles on the sidewalk outside the gray brick apartment building in Buffalo where Tara and her father lived. Caimile was the same age as Tara, and about the same size. Their dresses matched, except for the color.

Tara's favorite marble looked like a little globe, with milky white oceans and continents painted blue. She liked to thumb Antarctica before shooting this marble across the sidewalksphere where all their little worlds settled into the porous texture of the concrete.

Their legs sore from squatting over the marbles, Tara and Caimile took standing breaks every few minutes and pretended they were animals. Caimile was a giraffe, and she tilted her head back as though this elongated her neck. Tara took her sandals off and tried to pick up a marble with her toes, which were now her talons. She squawked. She was a bird.

"What kind of a bird are you?" Caimile asked.

"A red one," Tara said. Her dress was red. Caimile's was green. Caimile was a green giraffe.

"Let's play helicopter," Caimile said. She took Tara's hands in her own and sidestepped into a dance, then faster into a full spin.

Tara giggled as she tried to keep up with Caimile's steps, first on the sidewalk, then spilling out onto the patches of dirt flanking the sidewalk. Tara bit her lip and watched her feet. She didn't want to step on the broken lime-colored glass, all sprinkled and shiny on the dirt. She didn't

want Caimile to step on her feet. She heard then felt the beat of her box braids against the side of her head.

Then Tara stepped on a marble: her favorite marble, the one that looked like Earth. She felt it fling out from under her, behind her, as her foot kicked back into the air. She spun her head around both ways, trying to see which way the marble flew, but she was dizzy and off balance from all the spinning.

Tara's other foot followed back and out, and then she was looking at Caimile, whose feet still danced on the ground. Caimile swung Tara like a purse. She swung Tara around her as she continued to turn. Tara would have been airborne if her friend were to let go. Tara would have been a bird.

And just when Tara thought Caimile would have to let go because the spin itself was pulling her away and into the air, she screamed, two parts terror, one part glee. She pulled herself in toward Caimile. They hugged each other as they stopped.

"You're really strong," Tara said, after getting control of her breath again.

"You're really light," Caimile said. "I bet I could throw you over Mrs. Nelson's fence."

"You could not," Tara said. Mrs. Nelson was an angry old white woman who lived in a small house down the block. She was the only white person Tara knew by name. Sometimes Mrs. Nelson yelled at the kids in the neighborhood, so sometimes they threw stuff at her windows. But never a person. "I mean, could you?"

And, though Tara didn't break anything—not a bone, not a window—on her first attempt over Mrs. Nelson's chain link fence, Tara's father told her it was just because she was lucky. He wasn't yelling, he said as he swabbed her scraped knee with something from a brown plastic bottle. But she needed to be more careful. He wasn't angry, he said. He was just concerned.

Tara's bones were not like other people's bones, her father told her. "All bones are light, but yours are *really* light. Fragile."

"Like a bird's?" Tara asked.

"No, not hollow like a bird's," her father said.

Tara's eyes opened wide. A bird's bones were hollow? This was her most favorite thing, ever.

"They're just fragile," her father said, not yelling, not angry. "You also have some baby teeth in your mouth, where no adult teeth grow under them. We didn't have fluoride in the water when you were a baby, and we think . . ."

But Tara wasn't listening. She was wondering about the bones of birds and all the neat stuff they could keep inside them. She wondered if she'd ever find her marble again, the one that looked like a milky Earth. And more than anything else she wondered whether she was light enough to fly over Mrs. Nelson's fence.

Tomorrow she would have to find out.

Chris Moser was thirteen when he shot his first object into space from Chatham County, North Carolina.

Moser—as he preferred to be called—had actually figured out how to do it when he was twelve, but it took another year to calculate the right trajectory and exact launch window that would put his rocket into proper orbit from where they lived. One morning, finally confident in his preparations, he brought an empty Cherrygale can to breakfast. He placed it neatly in the middle of his empty plate.

"You're not having soda for breakfast," his mother said.

"I know," Moser said. "This can is going to be the first man-made object to go around the Sun."

His father said, "Well, you still need to eat something."

"In six months," Moser said, "It will return to Earth. I wanted to put some recording device in it, but it was too heavy with the engine, and it probably wouldn't survive anyway."

"Six months?" His parents looked at each other the way they looked at each other when they thought they knew something Moser didn't know. "You mean a year? It takes a year to go around the Sun, you know."

"Yes, Dad," Moser said slowly, patiently. "I know."

"A year then," his father said.

Moser sighed, looking at the hint of his own reflection in the rim of the Cherrygale can. It was vague enough that it could have been anyone's reflection. He liked to think it was the reflection of Christopher Columbus.

"It takes a year for us," Moser said. "And it takes a year for the can going in the opposite direction. In six months, we'll meet again, on the other side of the Sun."

His father made an exaggerated kissing noise as he sucked on his own bottom lip for a moment, and then: "I was just kidding you, Chris. Six months sounds about right. Good luck with that."

"It's going to be awesome," Moser said.

Six months later, when the can didn't come back down as predicted, his mother and father were very nice about it, even after begrudgingly driving him halfway across the state to the side of the lake where Moser thought it should return.

They even offered to wait a little longer, but Moser said there was no point. If he was off by a minute, he was off by hundreds of miles. More than likely the Cherrygale can never made it into orbit, if it even cleared the atmosphere in the first place.

"You got it off the ground, that's something to be proud of," his father said on the drive home.

"Maybe it burned up in the atmosphere," his mother said. "Doesn't that happen? Sometimes?"

His father suggested: "Extra wind? Something you didn't calculate?"

"Maybe," Moser said. He was only half-listening.

"An asteroid field? Like in your video game?"

"Mom, the chances of that . . ."

"We can't know every variable, Chris. Just predicting the weather is a crapshoot."

"Maybe it hit a bird," his mother said.



## NINE: THE HOLLOW BONES OF THE BUDDHA

Tara was sixteen and had never left Buffalo when she lost her virginity in the flower shop owned by David's parents. It was a life experience she figured she was ready to have. She was going to be a poet, like Rita Dove or Maya Angelou, both of whom had lots of life experience. It was late in the summer. She had a lot to do.

On the way into the flower shop, David told her how much he liked the thing she wrote for English class. "You know," he said. "That thing about angels. You should totally publish it."

"I will," Tara said. "I'm going to be poet laureate."

David had a hidden stash of marijuana in one of the few plastic plants toward the back of the shop. "They used to be real," David said, "But Mom never waters anything she can't sell, so they died."

He and Tara sat on the tile floor behind the register, and there she got high for the first time. Tara wore shorts and a camisole. The tile was cold. She leaned against the refrigerated glass case, which was even colder.

Tara decided to tell David a secret. At first she thought she'd save it for herself, and put it in a poem. But there would be many secrets to come along that she could keep for herself. She planned on having lots of life experience. She planned on being mysterious.

"It feels like the smoke is in my bones," Tara said.

"I know," David said.

"No, I mean like it's trapped in there."

"Cool."

Tara told him that her bones were hollow, which she knew wasn't true. A bird's bones were hollow but strong. Hers were just brittle, only about five pounds lighter than they should be. But it was important that she make it sound cooler than her father had made it sound when he had explained it to her. It was important that she focus.

"I'm not yelling," she said. She couldn't feel her lips moving when she spoke. It was like ventriloquism. Or telepathy.

David said, "Yeah, you're like the reincarnated Buddha."

All Tara knew about Buddhism was something about breathing and letting go. She asked: "Does the Buddha have hollow bones?"

"Probably," David said. "Take off your shirt."

Her eyes were puffy and her nose ran. She didn't know whether it was the weed or whether she was allergic to one of the pretty flowers or whether this was just one of those moments when she would cry. There weren't many so far, but there were some. All poets cried.

Surrounded by so much green, Tara felt like she was in a jungle and she never wanted to go home. She concentrated on her breathing. She wondered whether they'd ever let a reincarnated Buddha become poet laureate. She wondered whether David would somehow always be inside her, like the smoke.

"Don't break me," she said.

"Okay," he said, his hand on her cheek.

\* \* \*



Moser excelled in physics and engineering while attending Akron University in northern Ohio. He excelled sometimes to the detriment of any social life.

His favorite professor seemed particularly encouraging and interested in Moser, so much so that Moser decided to tell her about the Cherrygale soda can he launched into space seven years earlier. He wanted to know her opinion about what went wrong, though he suspected it was a wind problem, that he would have needed to manually correct any minor disturbances in its trajectory. He did not brag when he told his professor about it. He wanted to brag, but he didn't.

"This is a crazy notion," she responded, suddenly more rigid and professional than he had seen her with even the most unruly of students. "And it sounds like a very dangerous experiment which you shouldn't have tried."

Shamed, Moser walked quickly back to his dorm room. To think he had wanted to brag to her about his experiment. His roommate Aaron got up from his bed and punched Moser in the arm playfully when he saw Moser's dour look. He asked Moser what was wrong. He asked whether he'd eaten breakfast yet.

"Got chewed out by Reynolds. She really respected me, you know? I should have kept my mouth shut."

Aaron made a farting noise, called Reynolds a jackass, and told Moser not to worry about it. Aaron was on the MBA track and probably had not met Moser's favorite professor.

Moser listened with only half his brain. The other half quietly purged some of the more far-fetched ideas from his head. Becoming an astronaut. Developing new sustainable energy sources. These ideas were slow-acting poisons, he'd realized on the walk back to his dorm room, and he had wasted far too much time on them. He was twenty years old with twenty years wasted, twenty *poisoned* years he could never get back.

Moser picked up his notebook and ripped out page after page, tossing them at the trash. Aaron stood over his shoulder as he did so. Aaron smelled like cigarette smoke and stale beer, as though he hadn't brushed his teeth or washed his face since his date of the previous night.

"What's with all the triangles?" Aaron asked.

Moser had pages of them, simple illustrations of rounded-corner triangles with numbers scribbled in the margins. It was just an idea, and each triangle he'd designed and refined now represented a girl he could have hooked up with. Each one was a party he could have attended with Aaron. In the future, Moser would look for rounded triangles on all potentially poisonous ideas, just as he looked for the V-shaped heads to identify venomous snakes back home.

Moser didn't want to explain anything, waste another breath on a silly project, but he felt he shouldn't just close up the one time Aaron showed actual interest in what he was working on.

"It's a mirror," Moser said.

"Oh."

Moser hesitated. Aaron probably wasn't studied enough to laugh at him. Worst case scenario would be scaring Aaron into never asking him

another question, and frankly Moser could use the alone-time. He decided to risk it.

"It's a space mirror, light enough to launch into orbit inexpensively. If we ever terraform Mars into something habitable, a relatively small number of these mirrors orbiting Mars could help trap the Sun's heat within the planet's atmosphere."

"Cool," Aaron said, and then nodded blankly.

Moser considered whether he should explain what it meant to terraform Mars, how incredibly huge and important a task like that could be. Aaron wasn't stupid, but sometimes he lost himself in his get-rich-quick schemes as surely as Moser probably lost himself in poisoned science and invention.

"Mars can suck it, man," Aaron said finally. "I'm cold right now. Will this thing work on Akron?"

Moser didn't know. He had never thought of that.

"Breakfast?"

## EIGHT: ADVENTURES IN ISOLATION

Tara was twenty-five when she told Bhuvana, her lover of two years, that she needed more privacy than she currently enjoyed in their Rochester, New York apartment.

Tara had realized and accepted in college that she was a lesbian. Later Tara accepted that she'd probably never be able to quit her receptionist job and write poetry full-time. But it took her longer to accept that part of her that was introverted.

Tara felt ashamed of her social anxiety, her sometimes-reluctance to go to parties with friends, her exhaustion and irritability after attending those parties, and the cloud corrupting her ability to think as clearly when anyone else—even Bhuvana, who she often loved to spend time with—was in the room. These were symptoms of a phobia (perhaps it was even a disease?) that Tara could never view as normal, at least not in the way she could view her sexuality. She had told her father she was a lesbian when she was a college junior; she could barely even admit to *herself* that she was an introvert.

But now she told Bhuvana, who looked at Tara exactly as Tara feared she would look at her: with a disappointed frown, a tightened brow, and remote eyes whose brown color faded into the black of their pupils. Bhuvana's eyes told Tara that it was wrong to want to be alone, even for just an afternoon hour, and especially for an artist's retreat, which was just plain selfish.

"I'm looking at a six week fellowship," Tara said, after preparing her words in private. "Eight tops. You can come visit. I just need to get out of the cubicle for a while."

Bhuvana said, "I'm not here for your life experience." It was an argument for a different insecurity, but it stung Tara anyway.

So Tara said again how "it's not about us." She knew there was a better

way to explain it, a way Bhuvana would understand, but Tara could not find it in the cloud of her lover's presence. Tara had become an expert with words when she could prepare and revise them in isolation. But between work and Bhuvana, she did not get that isolation often enough anymore. And the consequences to her mental health were cumulative, like sleep deprivation. She needed the tiniest of vacations.

"I'm so sorry I ever got in your way," Bhuvana said. "Good luck to you."

After Bhuvana left their apartment for the last time, Tara found them, the words that might have convinced Bhuvana to stay. When Bhuvana had come out to her traditional Hindu family, they had responded that she would get used to living with a man if she would just find a husband, or even let them find her one. Asking Tara now to live a life always in front of others was like asking Bhuvana to live with a man and just get used to it.

Tara wrote the analogy down in her notebook, where it didn't seem so trite and useless. Maybe tomorrow she'd work it into a poem that Bhuvana would someday read and understand and feel bad enough about to call her. Someday.

Today Tara wished she had an anagram to get through the first few hours alone. Bhuvana used to create anagrams for her when Tara donated blood or visited the gynecologist. Working out the anagram would keep Tara's mind off the otherwise unsettling experiences. Her poet's pride made her feel guilty about escaping into her mind rather than staying present and mindful at important life events. But she believed the alternative would be a poetry cluster about barf bags and cowardice. She hated confessional poems.

Now this was an anagram moment with no Bhuvana. So she opened a bottle of Shiraz before pulling out her manila folder of applications for fellowships, writer retreats, and artist colonies. She reordered them so that the ones closest to Rochester, which would have been closest to Bhuvana, were no longer at the top of her list. Now Tara wanted to get far away from Rochester, from Buffalo, from New York. Something in a jungle would be nice.

By the end of the night, she decided to apply to four: two on the West Coast, one in Louisiana, and one sponsored by NASA.

NASA wanted to put a poet in outer space. The application was the only one she'd ever seen that asked for her weight in addition to the usual bibliography and writing samples.

Tara couldn't think of anywhere more isolated than outer space. And she was a little tipsy.

For three years, Moser spent seven months out of twelve alone on Great Bear Lake in northwestern Canada, doing the hour-per-day upkeep at an off season resort. Twice per month he received delivery of groceries, mail, and books. Otherwise his only contact with the outside world was through his computer.

Moser spent most of his day doing research, learning conversational Spanish, training with free weights, and typing up patent applications and proposals. He emailed the proposals to Aaron, his former roommate

and now a successful entrepreneur. Aaron found practical uses and unexpected implementations for Moser's designs and ideas, which turned out to be not so poisonous after all. If anyone ever laughed at anything Moser came up with, Aaron never told him about it.

Aaron and Moser were both multi-millionaires, largely because of a pen-sized transmitter Moser had designed and patented. The device could block cell phone signals within a thirty-yard radius. Variations of the device could knock out wireless microphones and other transmitters as well. Moser liked to believe that spies counted on his device for espionage missions all over the world, but Aaron had told him that regional theaters made up the bulk of their clientele.

Moser handled everything through Aaron, except for a construction project he managed from afar. In fact, Aaron knew nothing about that project. Moser felt it was better this way. If Aaron had known where Moser was dumping his half of the fortune, the least Aaron would do was laugh.

So Moser spent seven months of each year in solitude, not because he liked the work or needed the money, but because he wanted the practice and needed to prepare.

During the five months he wasn't at Great Bear Lake, Moser divided his time between his construction site and tedious meetings with Aaron's investors who kept asking him to "come up with another pen," meaning another device as successful as the pen-shaped transmitter, but not at all similar to it. They wanted him to come up with solutions to non-problems, which could make money. Which is why Aaron was better at this side of business than Moser ever could be.

Also in those five months, Moser spent a great deal of time at the bottom of swimming pools.

There, too, he was preparing.

## SEVEN: SPACEPOET

Tara was twenty-seven when NASA launched her into orbit.

The ten-month training was the antithesis of what she wanted in a writing retreat. When they weren't poking her with one thing, they were pushing her into something else. She trained fourteen hours or more every day, with homework besides and not even a graduate degree at the end of the rainbow.

The constant engagement (the constant people!) had kept her mind off Bhuvana, but it also kept her from dealing with the breakup as deeply as she'd needed to. She found herself reaching out to strangers for company at moments when she would have much preferred solitude. And she feared that she'd written Bhuvana into every poem of the last year.

Not that Tara had written all that many poems in the past year. But she told herself it would be worth it in the end to spend some time away from the world, practically alone in the sky.

There was a moment, as two men had lifted Tara out of a G-forces simu-

lator, when it had dawned on her that the prodding and attention could be just as bad in orbit, that the confined quarters of the International Space Station would lend themselves to even less privacy than she had had in training, and that constant watch from 220 miles below wouldn't be much better than someone physically looking over her shoulder. She also felt nauseated from the simulator, and she thought about the slow stroke with which Bhuvana's hands might massage her stomach after a heavy meal. "Effleurance," Bhuvana had called it. Tara would never be so loved again.

The rough hands of these two men, yanking her out of the simulator by her armpits, were a poor substitute for Bhuvana's, but Tara felt convinced that if she dropped out of the space program, she would never be touched by anyone again. Nobody was that introverted.

NASA had wanted a poet, because someone up high felt that all Americans, even non-readers, respected poetry. An administrator told Tara in confidence that no one trusted journalists to be independent anymore, and the fame of a well-known fiction writer would certainly eclipse the attention NASA wanted for itself. And if something went wrong? Well, how many *living* poets could the average American name anyway?

So they wanted a non-threatening poet to communicate to the masses the importance and adventure of space travel, and to capture experiences rather than tell fanciful or exploitative stories. In a perfect world, Tara might well become the most widely read poet of her generation (not that that was saying much), and NASA would gain renewed interest in the space program. And even if no one was interested in the end, Tara still got an eight-month vacation on the International Space Station out of the deal. Which, if Tara was lucky, could offer more privacy than her training had.

All throughout the preparation that didn't agree with her, Tara had expected the poet-in-space program to be canceled. She was sure that they would realize that no one, not even those who bought rare editions of Reynaldo Arenas and Edna St. Vincent Millay to decorate their condominium end-tables, actually read poetry anymore. Or worse, they would find some controversial, explicit haiku she'd written in high school that wouldn't test well with white America. It would be a glorious end to both poetry and space travel, an end that could only be eclipsed by an explosion on the launch pad.

But now she *was* on the launch pad (so far, so good), in the third most important seat of the shuttle. She sat back vertically, excessively strapped into an uncomfortable chair, facing up. She had endured the training, the invasion of her personal space, and now would come the big payoff. She wanted to throw up, but mostly in a good way.

Right on cue, Tara heard Mission Control in her headset, saying one of those things that made her want to throw up *in a bad way*:

"Are you ready to put poetry in space, Tara?"

Alistair, the astronaut in the chair above her, turned and offered her a thumbs-up and tongue-over-teeth smile. He was the type, Tara decided in training, who confused annoying with charming. He wore a "body spray," which Tara gathered was a perfume for men. As long as he didn't wear it on the space station, she didn't care what it was.

Tara looked over at Pia, their captain, who weighed almost as little as

Tara did. She was four-foot-two with normal bones, so far as Tara knew. Tara pleaded with her eyes ("don't make me say it"), but Pia shook her head and went back to her checklist, as always too busy to deal with Tara's little drama.

So Tara cringed and closed her eyes. Was she ready to put poetry in space?

"There's always been poetry in space, Mission Control," she said finally, each word deliberate and exaggerated. "I'm just here to bring some of it back to Earth." She hoped that anyone she respected would hear the sarcasm in her voice. Why again did they want a poet if they were just going to script this bullshit for her to say? She tried to stroke her belly through her coveralls. "Effleurage," she whispered.

The shuttle shook even before the countdown started. Tara reminded herself that this was probably normal. But what kind of shaking was atypical for a launch? In the simulators she could never even tell when exactly she was supposed to be airborne, which surely was a failure as an astronaut as well as a poet, whose job it was to observe things.

She felt herself sink back deeper into her seat. They must be in the air now. NASA had evaluated Tara's bone structure and decided she should be fine for space travel. They had machines to help prevent bone mass deterioration, and she should be more vigilant about using them regularly. But if she hadn't broken anything in a quarter century of living, a shuttle launch probably shouldn't crush her or anything. Probably, they said. Or anything, they said.

Radio transmission was nil—even if they could have received transmissions, they wouldn't have been able to hear anything on their headsets over the rumbling of the ship. This, Tara felt, must be what it would feel like to be truly unreachable. Not for the first time, Tara felt bad about being an introvert, sorry for not wanting to hear human voices every second of every day. She felt a sudden panic. Perhaps as punishment she would never hear a human voice again.

Tara had broken her characteristic introversion earlier in the week by asking Pia for an anagram to work on during the launch. Pia had said she was too busy—her usual response to anything involving Tara "The Space Tourist" Jones—but later Pia had cheerfully handed Tara a slip of paper with "SLOWED T BRIDE" written on it. She even told Tara a clue: "This is why you shouldn't be scared that our well-designed equipment isn't going to blow us all up during launch."

But instead of the anagram, Tara thought of something a college girlfriend had mentioned after taking a world religions class: that the Buddha was what connected people to the earth. Tara didn't know if he did, but she wondered what would happen if the reincarnated Buddha was launched into orbit. Would this doom the souls of mankind? Would everyone on Earth die?

Tara imagined a thousand Buddhist warriors discovering at the last minute that Tara was their reincarnated prophet, about to launch her not-quite-hollow bones into space. In order to save the world, they would have to stop her and destroy the shuttle. But it's a sin to kill the Buddha, so first they would have to meditate on this conundrum.



This could be her first poem from space, Tara thought. And then NASA would replace her with a young pop-singer/model-type whose palatable lyrics wouldn't challenge or offend. They could make the diva compete on a reality-TV show where she'd have to vote other anorexics off the shuttle.

Tara solved the anagram suddenly. "LOWEST BIDDER!" she yelled. She called Pia all the names she would not have been allowed to call her if the radio microphones or Pia could hear her. Tara would let those words be the last she screamed before leaving Earth's atmosphere.

The sky faded to black in the window ahead of her. It took Tara a minute to realize that this was a good thing. When the radio in her headset came back on, signaling that they and the people of Earth were still alive, Pia said the hardest part was over. Tara did not have the hardest parts, but she was unbroken.

"How does it feel, Tara," Mission Control asked in her headset, "being the first poet in space?"

"I'm not the Buddha," Tara said.

She wanted to throw up. But her twenty-eighth birthday was next week and she still hadn't broken a bone. In lieu of cake, she would be in orbit around the Earth, as isolated as currently scientifically possible.

She pretended her hand was Bhuvana's.

"Effleurage," she whispered.

Just before leaving Canada, Moser sent a large, flat envelope to Aaron. The envelope contained a copy of his will, and a large advertisement to be placed in the *New York Times* and in several prominent science periodicals once it was all over. There was also a sticky-note with the words: "Gone out for Cherrygale."

Moser sent a second envelope to NASA, containing a letter and a cashier's check. He set up his mail and e-mail to forward to Aaron's addresses. He forwarded his phone calls to Aaron's voicemail. He disappeared.

## SIX: THE WEIGHT OF WORDS

Tara had been in outer space only a few weeks when she heard that Cuba had launched a missile at her. It did not bother her as much as she might have expected it would.

In orbit, within the International Space Station (or ISS; life was too short not to give everything an acronym), Tara felt more disconnected, more trapped than ever. The stars were a gated community, and she was quarantined just outside the airtight walls. Though she was now part of the night sky, she felt further away from it than ever before. Even the novelty of zero gravity lost its magic the second time she had to go to the bathroom.

Video cameras and Alistair kept Tara constantly under surveillance. Alistair had been on Tara-duty since they'd discovered some mishap caused by the previous ISS crew, which lost them a month's worth of oxygen, and would cost far too much emergency fuel to repair.

Alistair didn't suffer the babysitting of their little space tourist gladly, especially after she'd ignored his advances. For exactly three seconds, Tara wondered how bored, frustrated, or just plain curious about weightless sex she would have to be to accept an offer that reeked of body spray. She knew that straight men without alternatives might have sex with one another in prison. Would a gay woman ever take similar comfort in the arms of a man in space? Not this man, Tara decided. Not even if not doing so would get her kicked off the ISS.

And not that it would ever come up, but sex with Pia was also out of the question. Pia treated Tara with an impatience others might have reserved for an untrainable kitten. This sometimes made Tara wonder how a disciplinary squirt gun would behave in zero-G.

Tara, for her part, was just as paranoid as they were. The walls, ceilings, and floors (and with no absolute orientation, how could you tell which was which?) seemed cluttered with displays, vents, and lighted buttons she feared accidentally tripping or breaking, and thus somehow dooming them all. Tara thought this was what a bone parasite would feel like if it tried to live inside her brittle skeleton.

There were no secrets on the ISS. Sound seemed to travel impossible distances in the modular corridors of the station. It was as though, because sound couldn't carry in the vacuum outside, every clank and whisper had no horizon to fade into, and chose instead to echo forever within their cramped cubicles.

Pia, Alistair, and Mission Control all knew the beats of Tara's heart. They sent an electric pulse through her entire body once per day to measure her current body mass and muscle deterioration. They knew how often she ran the pressure-impact cushion on various parts of her body. The device used magnets to simulate Earth gravity, theoretically reminding her bones that just because they didn't need to hold her body upright didn't mean they could just go ahead and waste away. The device was loud enough that the others couldn't *not* know when she used it.

They knew her body temperature at all times, something Tara had never before thought of as useful information. She considered asking for it every half hour, and seeing how many lines of a free verse poem she could write using only those numbers.

They knew what she read. They retrieved and archived wirelessly every word of every draft she wrote on her tablet. They hadn't let her bring paper or books because of the cost in weight, and any paper the astronauts had brought was earmarked for scientific work. So she had a palmtop computer tablet with handwriting recognition and a hard drive full of digitized books and references. She found the selection limiting.

Of her books, she missed her unabridged dictionary the most. They'd told her it would cost less to hire an army to type every entry into her palmtop than it would be to launch the dead tree version into orbit. Of course they didn't hire that army either. She'd offered to cut off the margins of the book, which should have been a savings of thousands of dollars in paper grams, but that hadn't been enough.

Mission Control knew within seconds what words she looked up in the limited tablet-dictionary they had given her. If she searched for a word



that wasn't in the database, they knew about that, too. They didn't upload the definition to her tablet either; they just kept a record of what she wanted to know. They were bastards. That was the only explanation.

She tried to write and revise poetry in her head, but her initial thoughts—which she was used to sorting through with private freewriting—were increasingly about nothing but how much she hated people, how much she missed her home library and her favorite bookstores in Rochester, and how God had tried to create her as a bird and failed miserably because it turned out he, too, was a bastard.

She considered giving up, just passively reading for the rest of the flight, and maybe asking Mission Control to upload some anagram games to her palmtop to keep her occupied. It wasn't her fault she was blocked for the first time in her life. She was learning to create, to think, on her public stage, but it was slow going, like learning to write left-handed after a lifetime of right-handedness crunched to a halt by a broken wrist. There was a better analogy in there somewhere about drowning, but she couldn't think clearly enough to see it through. So there.

Pia and Alistair had no use for her. They were busy with their own projects, science experiments that they didn't have the time or patience to explain to Tara.

Tara wanted to do experiments of her own. She wanted to flip through those hefty pages of her unabridged dictionary in zero gravity. She wanted to be the first woman on the Moon, if only to piss off Pia or at least get away from her, but of course they were both stuck in orbit with the rest of the space program. She wanted to weightlessly sip Shiraz from a traditional wine glass. It would take forever and make a mess, but it could be fun with the right drinking buddy. Tara wished she could let Bhuvana feel how firm her breasts had gotten in zero-G. Sometimes she wrote: "Muscle deterioration, my ass" in her tablet over and over, without further explanation. She was more alone than ever, and never alone enough.

So when Alistair floated his head into her cabin and asked her to come to the command module "right now," she thought she might be in trouble, that she'd forced them to find a way to send her home early. It was a good feeling, to be wanted somewhere.

After every movement, Tara still had to stop and allow her equilibrium to catch up with what she could see in front of her. Although there weren't many compartments in the ISS, each one could seem foreign when what you expected to be above you was now on your right, when you had never had this or that LCD at your feet before, and when you hoped that the lever you'd just snapped wasn't anything important. She took at least one wrong turn before finding a familiar orientation and following it to the command module.

"We don't know why," Pia said quietly when Tara finally joined them, "but Cuba has attacked us."

Pia was upside down to Tara as she said this, and Tara could not help but think it was a scene that belonged in an L. Frank Baum book. Cubans attacking upside-down munchkins seemed very plausible in a place like Oz.

"Hey!" Alistair poked Tara in the shoulder with his finger, the invasive way he would when he wanted her attention. "Are you smiling?"

"Am I?" Tara asked.

She imagined that Alistair's skeleton was half as brittle as her own, and how far she would like to bend his finger backward. If they were about to die, who was going to care about a few broken bones?

Moser originally picked Cuba as a launch base partly because he could build his project there using relatively inexpensive parts and labor, but also because it was closer to an equatorial launch than anything he could find in the United States. With Moser's revolutionary-but-limited engine, he needed to piggyback off as much of the Earth's maximum rotational velocity as he could get if he was ever going to reach orbital speed. And, just as importantly, one's launch determines one's orbit. Since Florida travel agencies were notoriously stingy about handing out permission to launch home-made rockets from the Kennedy Space Center, Moser determined that this location was his second best chance for hitting his mark.

He knew it was possible that the launch could be interpreted as an attack on the United States ("International" Space Station? Who were they kidding?), but he figured that by the time anyone worked out his trajectory they would also note his deceleration and thus discover he was no threat to anyone.

It certainly wasn't Moser's intention to attack the ISS. In fact, he just wanted to stop by for a couple of hours.

Then he'd be on his way.

## FIVE: CUBAN EINSTEIN

When the "missile" launched from Cuba matched the speed of the ISS, and seemed more interested in joining than harming them, only Pia continued to view the object as a problem. She only seemed to enjoy the experiences that she'd already practiced in a simulator. To Tara it was the most interesting thing that had happened so far on the trip, even if it meant there would be another person that she'd have to interact with.

They still didn't have a visual when the radio lit up and a deep male voice announced: "*Saludos*, Alpha."

Alistair looked at Pia. "There's no ship called '*Saludos*,' is there?"

"It means 'greetings,'" Tara said. "It's Spanish." She felt confident in saying it. She felt useful.

"You speak Spanish?" The question was to Alistair, not to Tara.

"Nope."

Pia sighed, which is what she always did before forcing herself to talk directly to Tara. Tara was still playing the role of Pia's kitten.

"Okay, Tara," Pia said, not making much effort to hide her predetermined disappointment. "Time to be useful then." She sighed again. Tara wondered if kittens could sense passive-aggressive behavior.

"I only speak a little, really," Tara said. A few inappropriate words from high school popped into her mind, along with memories of how she couldn't wait to drop the class. She'd read a great deal of Spanish language poetry,

but only in translation. She had thought about uploading a foreign language reference to her palmtop tablet earlier, but it just hadn't seemed important at the time. And, if she had, she probably would have chosen Hindi, not Spanish.

But Pia pulled Tara by the forearm toward the console anyway, pressed a button, and nodded at her. It wasn't a request.

"Um." As always with new people, Tara didn't know what to say. When she got back to Earth, she planned on using the whole space thing as a conversation starter. Maybe now she should purr and at least make Pia happy. "*¿Es usted Cubano?*" she asked slowly.

"Si!" the voice came back. And then there was a quick jumble of words Tara didn't understand.

Tara apologized to Pia, ashamed. She sucked at being a cat. She was better at pretending to be a bird. "I didn't get any of that," she said.

"Dock, please?" the voice on the radio said.

"I think he wants to dock!" Tara said excitedly.

"Yeah. Figured that one out, thanks." Pia said. "Ask him how many people he's got in there."

Tara tried to focus, working backward toward remembering the language. She counted in Spanish in her head from one to six, couldn't remember seven, and drew a blank when it came to asking the question. Maybe if Alistair and Pia went on an EVA and shut off their radios for a minute, she'd be able to think clearly enough to get it back. Instead she shook her head apologetically. She sucked at Spanish. She was a bilingual failure.

Pia grabbed the back of Tara's T-shirt and pulled her away from the radio. Tara felt as though Pia were carrying her by the scruff of the neck as she floated backward from the lighted console.

"I don't even want to think about the sicknesses they could be bringing up here," Alistair said.

Pia raised her hand as if to slap him in the back of his head. This Tara could respect.

Alistair rolled his eyes. "God, no. I don't mean because they're Cuban. I mean: we were quarantined before launch. They probably weren't."

The radio squawked again. "Asylum, please?"

Alistair burst out laughing.

"Quiet," Pia said.

"I'm sorry," Alistair said. "But anybody builds a rocket instead of a boat to cross to the States, they're gonna be the most valuable immigrant since Einstein. I guess I'll risk a fever." He laughed again.

Pia nodded, depressed the radio button, and then pressed an adjacent button. All the console buttons looked the same to Tara, with each cryptic acronym having more than one meaning she couldn't remember. She sucked at being in space, too.

"Mission Control, we have some good news and bad news," Pia said. She repeated the good news using much of Alistair's phrasing. The bad news, she said, was that even a fourth person on the station would tear through their resources—already depleted by the previous crew's accident—at an alarming rate. And it was still almost eight months before the next planned shuttle launch.

"If anything else goes wrong up here or anything delays the shuttle," Pia said, "I don't know how long we'll be able to keep four or more people alive."

Of the Cuban Einstein, two astronauts, and feline poet, Tara knew which was most expendable. Maybe they'd be kind enough to aim the airlock at the Moon before they pushed her out?

The latch opened and Moser smiled at the three residents of the ISS. There was the small white woman and the skinny dark-haired man next to her, both trying to maintain formal posture in the weightlessness. Behind them, at the far entrance to the docking bay, was a taller black woman, smiling. Even if Moser hadn't recognized them from the news photographs, it would have been easy to tell which one was the space tourist.

"He doesn't look Cuban," the space tourist said. She wore a T-shirt and cargo pants. Her arms were stretched above her head. She leaned forward at Moser, more curious than professional.

"Quiet, Tara," said the little woman in front.

"Sorry, but didn't we decide he doesn't speak English?"

"*Un poco*," Moser said. A little bit.

Moser pretended to struggle with broken English, and introduced himself as Esteban, a Cuban refugee seeking asylum. If the astronauts were impressed with his ingenuity, or with the way his rocket docked seamlessly with the ISS, they didn't show it. He moved slowly. He was cautious, but not overly clumsy. He knew he mustn't make them think he was capable of any harm to them or the ISS, even unintentional harm. The real difficulty, though, was in containing his excitement at having made it this far.

Moser carried a pen-shaped device in his pocket. Even now, after years of preparation, he had doubts about this part of the plan. If any idea was laced with poison, it was this one. Perhaps he could trust these astronauts. Perhaps he could tell them his intentions, and then no more deception would be necessary. Perhaps they would have their own ideas and solutions and they could work together for all mankind. They were all Americans, after all. They were all scientists, explorers. Except for the poet, these were his peers.

He remembered his joy when Aaron had unexpectedly embraced one of his dreams. But it was not this dream. No one shared this dream, though he hoped many would somehow benefit. He remembered his crushing disappointment when last he'd shared this dream with a person of science. He knew he was on his own.

Moser slipped his hand into his pocket and thumbed the pen-shaped device. A few minutes into his disjointed conversation with the astronauts, he activated it.

#### FOUR: UNDER A PIRATE'S BREATH

"**S**hit," Alistair said. "I think we just lost contact with Mission Control." They were right outside the docking bay, attempting small talk with

Esteban while Mission Control scrambled to get a Spanish translator on the line. Mission Control being in Texas, the astronauts hadn't thought it would take so long.

Pia looked at Tara. "Keep an eye on our friend. Can you do that? See if he wants some water? Make sure he doesn't touch anything?" She turned to Esteban and poked him in the shoulder, Alistair-style. "If you damaged my station with your little publicity stunt, I will kill you."

Pia and Alistair floated back to the command module, leaving Esteban in Tara's care. Tara had had nightmares like this: she was an ambassador and an international crisis depended upon her underdeveloped social skills. The world was doomed. She might as well start kicking buttons on the wall.

They smiled at each other cordially. Tara wondered if Esteban's presence had anything to do with Mission Control's silence. Had he broken something when he'd docked? In training they'd told her the ISS was pretty well armored against space debris and kamikaze satellites. Could Esteban be the reincarnated Buddha? Had his launch doomed the souls of mankind on Earth? Tara couldn't remember the Spanish word for bones.

"Would you like something to drink?" she asked slowly, in English. She lifted her hand to her mouth, miming drinking from a glass. She wouldn't know how to mime a bladder and straw.

Esteban turned away from her, seemingly more interested in the wall of clutter outside the docking bay. It was like enormous Velcro wallpaper, dense with tools, writing instruments, and lab equipment in a disordered array where everything was accessible, but nothing was easy to find. She watched Esteban reach out and touch it before turning back to her.

"No, thank you," he said quietly in English.

His accent was not Cuban. It was American. Southern. Georgia maybe? Bhuvana was better at placing people. Tara should call her.

"What?" Tara said. "What's going on?" She wanted to back away from him, but, floating as freely as she was, she didn't have any kind of leverage by which to push herself. She was still new enough at this that she thought she could move by swimming.

Esteban, however, was grounded. Tara realized he had one foot hooked under a wall notch with the expertise she had seen demonstrated by Pia and Alistair. He moved faster than Tara thought possible in the weightlessness, and grabbed her by the arm.

He pulled Tara close, and then let go of her arm so he could cover her mouth with the same hand, all this before she could think to scream.

"Sorry about this," Esteban said coolly. He kicked off the wall, flying them back into the docking bay.

Dear God, she thought. Where was he taking her?

Moser felt as though he'd forgotten something. He knew the equipment and procedures of an EVA as well as anyone could know them from books and video. He had not had access to official NASA simulators or training gear, though training at the bottom of a swimming pool had certainly given him a movement advantage.

After rechecking everything both on the NASA suit and in the interior of the airlock, he opened the doors to outer space. If the astronauts were not panicking already, they would certainly fear the worst when they noted the doors opening. It was time to allay their fears.

He thought this just as he discovered a new fear of his own. He swallowed hard, looking at the Earth and the Earth's sky from this angle. He could not stop thinking that an orbit was simply a perpetual fall. And it took a view like this one to show him he was afraid of heights. Perhaps everyone was acrophobic on a sliding scale, and he had just found his limit.

"Greetings, Alpha," Moser said into his headset. "Can you hear me?"

The voice came back tentative. It was the male astronaut who answered. "Five by five. Please identify yourself. Are you with Esteban?" He sounded bitter, and Moser didn't blame him.

Moser connected the hose from the ISS to his ship. The lever to unhook the hose from its dock was tighter than he'd expected, and Moser felt clumsy in the large gloves of his suit.

He tried to think ahead about how to improvise if he broke something. The early astronauts had used a ballpoint pen to fix launch equipment when stranded on the moon. With all his equipment, inventions, and million-dollar ingenuity, he was certain that a piece of plastic accidentally snapping would end his mission straightaway. But the hose and refueling switches gave with a little more push, and they did not break, nor did he let the effort's equal and opposite reaction throw him away from the ISS.

He breathed hard in his suit. This was it. He'd been rehearsing these actions for years. He hoped the words would not come out poisonous, because there was no way even Aaron could talk him down from here.

"My name is Chris Moser," he said. "I am a scientist and explorer and I mean you no harm. I have temporarily disabled all other radio communication to the ISS. I'm simply purchasing some of your reserve fuel." He did not call himself an astronaut. But he thought it.

Moser's greatest triumph and greatest failure was to find the sweet spot where he had just enough fuel and equipment to launch himself into orbit. A few kilograms more of fuel, and his rocket designs would have failed. A liter less of fuel and he would not have had enough power to reach even low Earth orbit.

But orbit of the Earth was not Moser's final destination. He was still a fourteen-year-old, dreaming about Cherrygale. He still dreamed about the far side of the Sun.

"Under no circumstances," Moser continued, "will I take so much fuel as to put you or your crew in any danger, and NASA will this week receive a generous donation, which should more than cover the expense of getting replacement fuel up here. But my mission itself is what will be of much greater benefit to the space program. It all depends on how NASA chooses to spin this once the situation is over."

Moser listened to his own breathing. It was loud in his suit, and he worried that he wouldn't be able to hear the response. He tried to limit his movement, to cut down all other noise. He tried to slow the sound of his breath, which just made it worse. First acrophobia, now asthma? All the



more reason to move on quickly, if low Earth orbit was so bad for your health.

"You will restore communication immediately." It was the commander now, the little person. She punctuated each word, probably even more angry than she was when she'd threatened to kill him outside the docking bay. "You are committing an act of international terrorism and it will be seen as such by every government of the free world."

At least they weren't laughing at him. Perhaps they had discovered their missing poet by now. He knew they would go to great lengths to protect their little tourist and avoid a public relations nightmare. He was counting on it.

"I am sorry about the methods," Moser said. "But history books don't tell us about what lengths Columbus likely had to go to sail around the world. Communication will be returned to you momentarily."

### **THREE: BROKEN BIRD IN THE WINDOW**

Tara needed to think. Presently—perhaps understandably—she couldn't get past the word "kidnapped." It was as though she'd convinced herself that "kidnapped" was an anagram for something more pressing, and her mind wouldn't stop racing until she identified it.

If she could have done her morning freewriting without the voyeurs at Mission Control poring over her every word, if her hands weren't presently bound by cord behind her back, and if she weren't imprisoned in the tiny excuse for the kidnapper's spaceship, then perhaps she could have written the word a thousand times and found something out on the other side. Or at least she could have massaged her belly.

She tried variations of the word and her situation, tackling the problem in her mind as she might tackle a poem. Kidnapping. Catnapping. Trapping. Hostage-taking. Piracy. Spacepirate. Like a carjacker. Spacejacker. Starjacking. Bound in orbit. Suffocation. Drowning. Tricked. Trapped. And then right back to kidnapped. How about context? Could there be a known mental disease where patients impersonated Cubans in order to hijack space stations? Bhuvana might know. This was a good enough excuse to call her, wasn't it?

The cord binding Tara's hands behind her back was surprisingly nonabrasive, even soft. Her bonds were not loose enough to wriggle off, but she felt that if she worked at it she might be able to squeeze a hand free. She didn't want to put this much stress on any of her limbs; she knew her bones were fragile enough that she was more likely to break herself than she was to pull herself free.

The radio had just lit up and she heard the kidnapper take credit for the station's inability to communicate with Mission Control. He'd identified himself as "Chris Moser," not Esteban. She wondered if that was a name she should know. She had heard Pia's response, angrier than Tara would have expected, but who knew how much of it was posturing? Or could it be that Pia actually cared whether Tara lived or died?

She saw someone in a spacesuit fly by the window. The person's sun-visor was down and she didn't know whether it was Alistair or her kidnapper behind the dark glass. The suit was so loose and undefined, it could even have been Pia. Tara screamed "Help!" and then felt stupid for forgetting the one thing she actually knew about space before training began: a lesson taught to her by an old movie poster about sound and screams in a vacuum.

Tara felt herself flushing. She made a face that she hoped would look like and exemplify the word "help," but she wasn't sure Alistair, or whoever it was, had noticed her before the spacewalker floated past and his field of vision no longer included the porthole.

Screaming at the astronaut made her realize how quiet it was in the kidnapper's ship. There was the whirring of machinery she couldn't see, but it was no more disturbing than the white noise of a fan and, compared with the clanks and rumbling and chatter of the ISS, it was practically silent here.

Esteban (or Moser or whatever his name was) had stuck masking tape on many of the console buttons, detailing their function. Tara realized she could actually understand what each button did, a far cry from her reaction to the vague, acronym-littered panels of the ISS command module, designed to confuse and keep Tara a helpless tourist, no matter how much she'd trained for the mission. Strange that a holding cell would make her feel empowered about space travel for the first time.

Suddenly it occurred to her that there'd been no mention of her kidnapping on the radio. Did Pia or Alistair even realize she was missing? Did they even understand that Esteban and this Moser character were the same person? He hadn't promised to return her to the ISS before going off on his "mission," whatever that was.

Shit, Tara thought. What if he planned on taking her with him?

Tara pulled harder on her hand and started to think she wasn't escaping fast enough. No one was coming for her. She realized what she had to do. She would have to break.

She took a few breaths to calm herself. Then she jackknifed off one wall as best she could with her arms tied behind her, and floated to the opposite wall only a few feet away. Before impact, she bent both legs and knees in a hunched-over squat, and, when she felt her feet flat on the wall again, she sprang backward toward the previous wall as fast as possible.

A bird needed her freedom. She hoped she would crush only one of her hands.

Moser completely emptied the auxiliary tank from the ISS as planned, but the refueling finished far more quickly than he had expected. He rehooked the hose onto its base on the outside of the station, using more liberal force this time to attach it back into position. He used his hands to walk himself back to his ship and peered inside.

The tinted portholes were darker in the low Earth sky than he had expected them to be. He saw a hint of the lighted panel, but not the movement of the poet within the cabin. Moser had anticipated that he would need to see the fuel gauge from outside the craft, so he had created a



small array of mirrors, illuminated and clear to anyone peering into the porthole.

There was a problem.

Moser had about 80 percent of the fuel he needed to break out of Earth's orbit and reach the approximately one-hundred-thousand kilometers per hour he required to get into orbit around the Sun in the opposite direction. His current rotational speed would only take him so far.

He realized that they must have shut off his fuel from the inside; that was why it had stopped early! He had thought for certain the astronauts would be compliant, that they would not want to risk the life of their poet.

"Alpha! Did you block my refueling?"

"Negative, Moser," the man's voice said blandly, after a moment. "You've depleted our auxiliary tank."

They were lying. Moser knew for a fact that they had more reserve fuel in that tank. Moser needed to be more assertive. He couldn't let them stop him now. "Alpha, I cannot complete my mission without sufficient fuel. Please explain."

"Explain what? You sure you don't have a leak? Duct tape can only handle so much pressure, you know."

Leak? Was someone out there with him, sabotaging everything? What did he mean, leak? "Alpha, what did you do to my vessel?"

"Not a damn thing. Our emergency fuel was low from repairs we had to do last week. Maybe if you stopped blocking our communication, our boys on the ground could help you with your little problem."

Moser wanted to hit something. He couldn't fail when he was this close.

He went over the numbers in his head. With the amount of fuel he had at his disposal, he would need to drop more than thirty pounds. But he'd already cut everything he could. Every food substance on the ship was even the maximum calorie-per-ounce. The few redundancies he'd allowed himself in emergency heat sources, paper, and oxygen candles amounted to barely five pounds.

And Moser dared not steal any of the space station's primary fuel, for fear of dooming the astronauts on board. If he killed three innocent people it wouldn't matter how important his mission was. No history book would forgive him. Would he be able to forgive himself? Moser couldn't imagine a joyride around the Sun, six months alone with just his guilt for a copilot. And NASA wouldn't go out of their way to catch him when he returned to Earth's atmosphere six months later.

As Moser made his way back to the airlock, he felt his pulse throbbing in his temple. He'd have thought such a rapid heartrate would come bundled with exhilaration rather than despair. He looked down between his feet so he could see the Earth, possibly for the last time as a free man.

But it wasn't there. Moser's body tightened up. He looked frantically left and right. His suit movement was too slow for his panic. He would suffocate and fall and fail in all other ways it was possible to fail.

Then he realized he was upside down. Or the Earth was. He looked up at the world above him, and in his head he felt its immensity crashing down upon him.

Perhaps it was not too late to ask for help. He had no alternatives, and he could still bargain with them. He had a hostage, as well as control over their ability to communicate. Perhaps they would find an error in his calculations, some metric-to-standard conversion he'd failed to make properly on his own. Perhaps he could work this out.

"I . . . have an engineering problem, Alpha. I need to lose thirty nonessential pounds to complete my mission."

"You tried cutting off your head, asshole?"

Moser turned himself around awkwardly to look back at his ship. A light was on in the cabin. He could see quite clearly into the porthole now.

He saw the poet's middle finger pressed against the inside of the tinted glass. Her finger looked crooked, bent, but it might have just been light distorting through the glass. They were laughing at him.

Moser looked again at the enormous Earth above him. He was beneath it. He was in hell.

## TWO: A ROOM OF HER OWN

**T**hey locked the pirate outside the airlock while deciding what to do. Even with Tara free, this Chris Moser character insisted he wouldn't restore communication with Mission Control until they helped him figure out how to launch his toy rocket around the Sun. He had a few hours of oxygen left to suck on while they let him reconsider.

Tara remembered a scene in a space film where stranded shuttle passengers communicated with Houston using Morse code and some long forgotten switch or another from a previous mission. Pia and Alistair stared at her blankly when she suggested this. "Well, if we knew about the switch," Tara snapped, "then it wouldn't be long forgotten, now would it?"

Tara's left hand stung much less than she felt it should. All her life she had been scared of breaking a bone. Now she'd found that it wasn't so bad. She'd only seriously injured a finger and a thumb, and Alistair had set and wrapped them for her. This experience, too, wasn't so awful; in all the excitement, Alistair had forgotten to reapply his body spray.

She felt extroverted and elated after her kidnapping and escape, and the ISS felt less confined. She wasn't going to be treated like a kitten anymore. She was a bird, damnit.

"Does it hurt when I do this?" Alistair asked, suddenly with a legitimate reason to poke her with his finger.

"No," Tara said. "But I don't think I'll be flying again anytime soon."

Tara realized that with communication down, Mission Control must not be monitoring her palmtop tablet. The realization was bittersweet. Now that she could finally write her poetry unobserved, there was an emergency that demanded her assistance. She stared at her tablet, thinking she would never get a chance to write another poem.

But if Moser had left a frequency open so *he* could communicate with the ISS, he couldn't be blocking *everything*, right?

"Anyone down there still read poetry?" she wrote. She thought a moment about how they could respond to her. Upload a file maybe? She added, "Golly, I would love to read some D.H. Lawrence, if only someone somewhere knew how much I would."

She refreshed her file browser every few seconds. After a minute, a new file appeared on her tablet called "DH." She opened it and it said simply: "Working on the Lawrence. You guys okay up there?"

They communicated this way for a few rounds. She shared with Mission Control the names "Esteban" and "Chris Moser." Mission Control came back with some info about him. They'd already started an investigation because they'd received some sort of manifesto-letter in the mail, along with the biggest independent donation to NASA in decades.

Chris Moser was an inventor. He'd had a few publications in academic journals and they were trying to find copies. (Tara wondered if NASA had scrambled like this to read any of her more obscure publications.) But one of Moser's more successful patents was a pen-sized transmitter that blocked cell phone signals within a short range. Could he have modified it to disrupt certain radio signals as well?

Tara remembered how her kidnapper had touched the wall of clutter outside the docking bay before taking her to his rocket. She told the astronauts to look for pens, somewhere in the middle of the wall, or maybe something that could contain a pen. Alistair scoured the Velcro wall and found the transmitter tucked in with a pouch full of pencils.

A push of a button restored communication to the station.

Though Moser insisted he was no threat, the astronauts kept him tied up in a side chamber. He was fairly certain he could break free of his bonds if he so chose (if the poet could do it, then certainly he could), but he decided to stay submissive if only to keep from angering them more than he already had.

He wondered though if his inability to put their lives at further risk was a lack of drive, a lack of the kind of spirit that put great men in history books. Surely Columbus knew some of his own crew wouldn't survive, even if they had followed him willingly.

The tourist—the poet—visited Moser regularly, which surprised him. Of all the three, he'd expected her to be the least forgiving. He had never wanted to hurt anyone, and he was thankful he had used a non-abrasive cord to bind her wrists. It hadn't been an act of kindness to choose that particular cord; it was simply the lightest binding material he could find.

When he asked her why she came to talk to him, she showed him the stash of blank paper she'd stolen from his ship, now all scribbled over with sentence fragments that made little sense to him. She said she'd forgotten how wonderful rough drafts could be.

It was like talking to a child sometimes. Still, she seemed to like him. Maybe if his dream was truly over, it was time to start thinking about dating again. They had more than eight months to get to know each other, after all.

The poet asked him if it would be possible to modify his pen-shaped

transmitter to block the signals coming from her tablet. It would have been easier to remove the internal antenna from the tablet itself, but he chose not to tell her this. He was in enough trouble as it was.

They hadn't decided what to do about Moser yet. NASA hadn't even gone public about his whole scheme yet, but he wasn't so sure this was a good thing. The ISS commander said he would be tried and hanged for treason, terrorism, and even piracy if he ever made it back to Earth. But if they chose instead to sweep him under the rug, well, the rug was the airlock.

The cryptic advertisements Moser had asked Aaron to submit to the *Times* and the science journals might not be accepted at any price, and, if they were, they were likely to be dismissed as the ramblings of a crackpot, especially if NASA denied all knowledge and Moser's body burned up in orbit.

In the meantime, the poet seemed to spend a lot of time on Moser's ship. She said it was quiet in there, as private a place as she could find in orbit. She asked him for ways to add a small pressure-impact device to his ship's chair. The device simulated Earth gravity's effect on bone density and she had to spend at least a few minutes with it daily, probably to prevent osteoporosis. Bone mineral loss was a problem for men, too, in space, but it was an area he had deliberately sacrificed to the weight gods to get his ship off the ground.

The poet said that, if she had her way, she'd spend all her time on Moser's ship, which was an interesting attitude to have about a former prison cell. She'd even asked Moser about his mission, and about how much less Moser would have had to weigh to succeed with the fuel he had.

"I don't know," Moser said in dismissal. He had been over it too many times in his head. He'd tried. He'd failed. That was all there was to it. "A hundred pounds? Probably closer to ninety."

"Really?" she asked. She said something about it being time to check her vitals and pushed off away from him.

## ONE: AMBASSADOR

**T**he only thing Tara knew about Cherrygale was something she'd accidentally stumbled across doing unrelated research: that someone came up with the cherry-sweetened soft drink in the South during the World War I sugar shortage. Tara didn't know why or how she remembered this (having never tasted the drink—it wasn't available in the North) or even whether the story was true. But it had stuck in her mind.

So when Moser told her, "Godspeed, Cherrygale," between strapping her into his rocket ship and launching her into orbit around the Sun, Tara took it as a term of endearment.

She came to it with a poet's mind and decided that Moser was sugar and Tara was cherry. When sugar was incapable of orbiting the Sun, cherry became an acceptable substitute. Either that or it meant that Moser

thought every African American had a soft spot for fruit flavored soft drinks.

Later, over Tara's regular check-ins on the radio—an hour, twice per day, no more—Moser shattered the analogy by telling her about a childhood experiment of launching a can of Cherrygale into orbit and losing it forever. Tara found this story much less endearing.

Moser also said the story about cherries probably wasn't true. "They sweeten everything with corn syrup these days anyway."

"That's nice," Tara said.

At first, Pia seemed mortified by Tara's desertion and Moser's participation in it, but, surprisingly, she quickly warmed up to the idea. Maybe she realized how great this could be for the space program or maybe Mission Control ordered her to play nice so they could take credit for the adventure. Tara figured it was more likely that Pia was just glad to be rid of her dead-weight tourist.

Or perhaps Pia was actually a Buddhist, practiced in the art of letting go, and Tara should have tried harder to like her. Seriously, would it have killed Tara to purr once in a while? Or at least do some actual research about Buddhism? NASA, for its part, seemed thankful that they hadn't gone public and vilified Moser yet, because they still needed him around in case something went wrong with a rocket ship only he understood.

And, for a good three weeks, Tara enjoyed her retreat. She wrote and read, and at times just stared out into space. Moser's ship rotated completely about once every eight hours, and the short, wide window viewing area was limited to not quite 180 degrees at any given time. Somehow in this smaller, more fragile vessel, she finally felt close enough to observe the universe around her, especially during those hours when Earth was out of view completely. Sure, at times she felt lonely, but it was usually a specific loneliness: an ache for her books, for more room to stretch, for Bhuvana, for effleurage, for chocolate, for music, for sex.

Her tablet's limited wireless communication ability was beyond Earth's reach within a week, so she read whatever she wanted to read as freely and anonymously as she would in a library. This privacy perk more than made up for her inability to receive title refreshes from Mission Control. Still, she preferred to write her rough ideas on paper, and then recite the final drafts of poems and other observations into the ship's more powerful radio at what she called her "Extroverted Hour."

Then Tara saw something new. Earth didn't look quite like Earth. It was suddenly much farther away and whiter than she'd remembered. It seemed to be setting deeply behind the Sun. There was something else surreal about it that made Tara think she was only dreaming, but she could not quite pinpoint what it was that gave her that feeling.

Perhaps it was just a cloudy afternoon for this particular hemisphere. The world was milky, she thought, and she wrote down how she wasn't sure whether she'd lost her marbles or finally found her favorite one. She decided not to report her observation just yet.

This different-looking Earth disappeared from her field of vision, and then reappeared as normal-looking Earth (at the proper apparent distance) less than an hour later. She wondered if it was just an optical illu-

sion or a hallucination she had seen. Had the rotations of Moser's ship increased? Was she spinning on a new axis? That would mean an engine misfired, wouldn't it?

And then she realized what was really wrong with the different, milky Earth: it was on the wrong side of the Sun.

Maybe it was some sort of reflection. That could account for the discoloration, too. She should report it immediately, she thought. It could be an eye problem, a vitamin deficiency, or a sign of oxygen deprivation.

Or it could be a great big space mirror on the other side of the Sun. She tried to think like a scientist. But she still didn't want to contact NASA with questions and no answers.

Four hours later, Tara was thankful they no longer monitored her heartbeat. She was going to be the most famous poet in the history of the world, and then some.

She debated how to tell NASA about it. She realized that whatever she said, those words might last forever. She was late for her Extroverted Hour, but she wanted to get it right. She felt the eyes of the world over her shoulder, even as she wrote in absolute isolation.

Oh what the hell, she thought. Shakespeare wrote his name into a psalm. The world would forgive her if she put hers in a haiku with much less subtlety. She wrote,

Other side of Sun:

Second earth in same orbit.

Not kidding! Tara.

It wasn't exactly poetry, but that was all right. Tara was an astronaut now.

Christopher Columbus had planned on going all the way around the world. Moser had planned on going all the way around the Sun. He should have suspected that history could repeat itself, that it could both disappoint and surprise. He should have considered the possibility that, however unlikely, another planet *could* be 182.6205 days behind the Earth, in equal rotation around the Sun, always hidden from Earth by the biggest barrier in the Solar System.

Or some astronomer should have detected the slight gravitational pull a second Earth half a year behind them would have on the Sun. Surely an astronomer with cursory understanding of physics should have detected an equal and opposite reaction, no matter how minute, such a mass would have on the other masses they did know about. Or one of the probes NASA launched further out into the Solar System should have caught it in a photo. Perhaps one did, Moser thought. And perhaps it was dismissed as a trick of light or a photographic negative accidentally reversed.

But there it was. Proof that coincidences did happen. Or that God was playing peekaboo. So what if it took a poet to find it. If Moser had been a poet, perhaps he wouldn't have needed Tara.

Tara was two months away from reaching the new planet, her journey cut short from six months to three. But Moser could not help but feel the urgency of the situation. He had built a parachute into his ship



for his own return to Earth. But, in truth, he had hoped to motivate NASA or another excited space program into rendezvousing with him before he hit Earth's atmosphere. And even if the clouds on this second Earth meant the atmosphere was thick enough to catch Tara's chute, what were the chances of the atmosphere also being breathable and nontoxic?

Best case scenario, if Tara survived the impact, would be her sitting there grounded in Moser's ship until she suffocated or starved. And they wouldn't even know what happened to her, since they wouldn't be able to pick up radio signals all the way on the other side of the Sun. Sure, she said she loved her isolation. But that didn't mean she wanted or deserved to die alone.

"Very funny, Moser," Tara said suddenly over the radio. He had long given up trying to get her to address the ISS as "Alpha."

It was now a few weeks after Tara's universe-changing observation that Earth wasn't the only Earth in the Solar System. She was early for her Extroverted Hour but generally Moser or Alistair monitored the radio in case of emergency. It was especially important now, as the radio signal became fainter, and its delay longer, the further away she flew.

"Come again, Tara?" Moser said and waited.

"I'd send you a postcard if I could," Tara said. "How long have you been able to monitor it?"

"Monitor what?"

"My tablet. You guys boosted the signal or something?"

"What are you talking about, Tara? We haven't been able to ping your tablet for a month."

"Don't be an ass. I saw the new file. 'If found, please return to Christopher Moser.' Is that really your address? I used to date someone from North Carolina."

"Please return?" Moser said back to her. He didn't know what else to say. That Tara's Extroverted Hour was about to get a whole lot longer? For as long as he could remember, Moser had wanted to be a scientist, an astronaut, an explorer. He had wondered what happened to his Cherry-gale can ever since he was thirteen. He'd dreamt that it had gotten swept out of trajectory by random wind, or that, at best, it had melted in the fires of the Sun. But never in his life had he considered that anyone *anywhere* could have found it, or that there would have been enough discernible text on that Cherrygale can—or on the note etched on the inside of its makeshift engine—to teach a new civilization the Roman alphabet. The note had been his mother's idea.

Now that Tara's survival depended less on his own invention and more on the know-how of an alien civilization at least advanced enough to communicate in binary, Moser's thoughts turned to his own fleeting legacy. Who would remember the man in Tara's wake, the man too heavy for his own carefully planned mission?

"Please return," Moser mumbled again, and perhaps he even meant it. Because turning the ship around, as difficult as that might be, suddenly felt infinitely easier than telling an introvert she had just made first contact. Moser was never that good with people. ○



2006 saw publication of *Here in Cold Hell*, the second volume in the author's Lionwolf Trilogy (Tor Macmillan), *Piratica 2: Return to Parrot Island*, the second book in a female pirate saga (Dutton), as well as *L'Amber* from Egerton House. Egerton House has just released two more novels, *Greyglass* and *To Indigo*, while the last Lionwolf novel, *No Flame But Mine*, and the third *Piratica* book are due out later this year. Ms. Lee has recently sold short stories to *Weird Tales* and *Realms of Fantasy* and novellas to *Firebird* and the SF Book Club. In her latest short story for us, you'll find there's no warmth to be had from sitting by Ms. Lee's ancient and eerie . . .

# COLD FIRE

Tanith Lee

**W**e was ten mile out from Chalsapila, and it's a raw night. The sea mist brewing thick as wool. Then little tramp ship come alongside. I on the bridge with Cap'n. He my brother. Kinda. Jehosalee Corgen. Well. But sudden the tramper puts up her lights. She's gotten a lot of sail on for what she's at, maybe tracking tobaccer or hard liquor up and down. They take a need of that, in the little ports along Great Whale Sound.

—Fuckendam, say Corgen. —What this bitch go to want?

I shrug, don't I. How the hell I know. I amn't no sailor, I. He picks me up drunken at Chalsa, tooken me aboard. I can trim bit of sails, take a watch, that kinda stuff.

Now the tramper swim in close, making signal.

Across the black night water, Corgen and her cap'n speak.

Sounds threat-like ta me.

—What he say? ask Beau, the mate.

Afore I can offer, he goes up ter see.

Then so does I.

We stand there on the poop, with the great wing of foresails over, and lanterns flash, and I hear other cap'n tells Corgen —Hey, this good for ye and yor crew. Make lotta dolla.

—Don't need no more cargo, say Corgen.

—Nar, yer take this, no cargo, just tow. Like horse with wagon.

—This gurl ain't no horse, say Corgen.

—Hey hey, she a good ship. Has the weight ta do it.

I think the guy on tramper he sound like a Rus. Looks too, big, good-looken guy, and beard.

He say, —All ye do, tow dammen thing outa back and up. Get maybee nine hundred dolla. We given ye wodka too.

Shooting star is went over, like a silver angel spit.

Seems to me maybee guy on tramper is eying me real much. I go off. Then Beau come back aways. —Govment, say Beau from mouth corner. —Seems we havta.

Corgen's busyness on sea never much legal. But govment boats turn a blind ey, ifn you make nice. So we'll do this, what so this is.

In a bit, tramper boys bring some stuff aboard, boxes, a crate, wodka in big cans like for kerosene. They gives ta Corgen where to go to pick up thing wants the towing, and he writes down careful. He sign a paper too. The tramper turns off up the side of the night.

Boxes, stuff, full of food.

I hear Beau ask Corgen soon what the fuckdam we be go to carry.

—Chunk bludy ice, Corgen say. —Chunka ice and tow her up into bludy Artic.

—So high?

—Higher maybee. High as she go.

—For why in Christ's name?

Corgen shrug. —For nine hundred dolla.

Weather is clear, sea nearly smooth. Now we was sailing norard easterly, where the tramper say go. And all that pass us is fisher boats for the cod-fish, and the faint shadow that come and go of the land. First night ends and then a day, and when the sun low, making the sky red, Hammer up in look-out call he can see something new on the water. Men went go up rigging, to see, and so do I. Hanging there I can make out a kinda island, but it all put together of boats and rafts, with nets drifting, and there torchlights burn, so's as the red sea and sky gotten black, this island what is no island, she go red.

—What there behind?

We crane forard like birds, stretch our necks. Behind the torch smokings stand something pale, like it was a misty pane of glass, so the darkness show through.

—A berg what that is.

—Nar. None of they here.

—A berg, I tells you. They come down this far, from Grenland. A great narrer one.

Like a piece of glass, like I say, so it is. A piece of great ice, chipped offn sailing free, as the icebergs do.

Then come another ship, a big one she is, with no colors but with guns, and men on her deck all armed, officers and soldiers, only they ain't wearing any uniform, but you can see they are, the ways they's stood.

Corgen and Beau and Bacherly, they get rowed offn away.

We set ta wait. Don't go no closer.

Over on the island of boats men move around in the light and shadow, can't see what they do, that's all. The berg, if it a berg, none of us sure, goes fainter in the smokes.

Along of midnight, Corgen and the others they bring back.

Corgen has face like dried white fish. Other two ain't much pinker.

They come aboard. Corgen grabs me. —Pete O Pete, say Corgen. —Christ. I never shoulda took this on. Thin luck, the days we leaves Chalsapila.

Then he puts his head down on my shoulder, like as when we was childa and ma was raw ter him.

The six other men on Corgen's bucket, they clusters around, and the over us sails nod, cos the wind's getting up from the south.

—Cap'n, what's to do?

He lifts his head. He look scared and sick.

—Never word'll come outa me, he say. —Shitten govment say we must, so we do. I can't tell you. You'll be to see it, morning come.

We stand round him, and his boys look like they have mutiny running in the back of their eyes. Then Corgen rechanges to his own self. He reach out and grip Hammer and Bacherly and shake pair of them so as the bones rattle under their clothes. —We got no choosing. Like birth and dying. No choosen. So we take it. Bruk the wodka out, Beau. We've a long haul to the North fuckdam Pole.

Second night on the new course, two of Corgen's men jump over. You can see the land, can reach it if swim strong, and though that sea cold, men have their reasons.

Another man, Bacherly, he go over next night and not so lucky. Struck the side and stunned him. He's drunken, I guess. We pull him back aboard and empty him of water, but then he lie raving and shaken till Corgen speak to him. —I tell him, bite yer tongue or I'll throw ye back down.

Sight of land is gone by then. Bacherly is quiet, but sometimes he puke, or he cries.

The others is make to be brave. A coupla of them make pretend we don't tow no thing at all. Ando cusses a lot. He anyway allays do that.

None of them much goes aft to look. It doesn't matter if they looks, it amn't a danger—no moren towing it. They did tell us, when they brung it, and all the cables and chain was fixed and the hooks to hold all, they do tell us then, the ice on the berg is old and set so hard, thick as stone wall, the officer say, ten feet —forget it —this more twenty feet thick of ice. Can't stir. Can't break. This why it must be took to go upways north, to the Pole, this why. Though it came, officer believe, from the Southron Pole below, all the wide mile down at the earth's end. From there. And all this time, the ice held. So now, cold as we go, now it shall never give way. He swears that too, on the Bible.

Since Chalsapila, when Corgen finds me in alley, I don't drink. Even the Rus blue and black wodka, sharp as spikes, I left it alone.

I saw to the work I can do, and I eat when others have their food, though they keep back the food the tramper gave us for when this is done and over. Also I play them cards. Corgen gives me some money, so I can gamble on cards too and pay up when lose, which I do. Sometimes when I climb up the yards, I tend the ties and canvas, but then I set a while, and look back along the ship to her stern, back to where the berg is. It is about half ship's length behind, seems to drift there. If was not for the iron cables, you should think it only followed us.

He said, the officer, the ice is twenty feet thick.

Yet I see through. Transparent, the officer say, like crystal, this type of berg. Means nothing, still thick as five stone walls.

By see through it, I mean it's as like you look through frost on glass. I remember a gurl once, she wants her drink in a frost glass. Like that.

If any of the others see me, staring back, they never show at that time. Only Bacherly is sick, crying in the hold on his blankets. When I go to want to give him the hot soup he throws it down and he say I'm mad, to sail the ship. He say I never needed to go on, I coulda gone over side and ashore, I, like the other two that jumped over. He forget me that I can't swim.

But anyhow, strange though that is, I amn't afraid of it. What I am feeling as I look at it, I don't think to be fear. But each day or night then, either I'm up in the rigging, and watch toward the stern, or then I go up on the aft deck, and whoever is to be there at wheel, he give me a glance.

One say —Right glad I am that sail tween me and that sea.

One say —You insane, Pete Corgen. I allays knew ye was. Is drink rottened yor brain.

As him he drink from wodka can.

But I go on by to rail, and I stood there, and I look. The first night I am doing it, the moon's up, and the biggest, brightest of the stars. Shines right through the ice, like the electric light in the bar shone through that gurl's frost glass.

I never am mad, as that man say. I be have seen them as are mad. I am not.

Now it seems, that first time, never I see it so good, not when it come, and they ties it to the ship. Perhaps then I couldn't. As when you young, the first time you truly see a gurl, you canna look proper at her, though she is to be all you ever think on.

But first night in moon's shine. Well.

Christ. Like fire it is. But dull in frost. Frozened. Yet beautiful.

Beautiful.

Once saw a metal forged, was steel. It went go that color, afore the cooling starts. But this, this is tween the heat and the cool. White red. Red silver. How can I say?

The shape.

Well.

I have see a lizard once. Yet this now not really like this lizard, which was only small, a kind creature.

And this ain't kind. Nor small.

Well.

How can I say?

Well, let me say, first time I fuck a gurl, when I have seen her nakd, and there she is, my heart in my throat she so sweet and so.

There's no word.

And this, neither no word.

And still I must try explain.

Up in the column of the narrer ice the shape do stood, and it have the body of a lizard among the giant kind. The backbone is curving, flexed like a curl of rope. And all covered with scale is it, like a great fish. And it is have wings. The wings are more like they of the butterfly. But tough, the

wings, tough as sails, and have a pattern, but this like the kind of written book I canna read, the pattern. And it has legs, and forelegs like long arms, and on them like hands, both on the feet and the front feet, hands. And the hands do have to be with claws. Each claw look to be length my forearm. Then there is long neck, and the head.

What is head of it? Like horse, a little. But not like horse. No, like the lean head of race dog, long, and thin. It with two ears, set back. Ears are like dog ears. And the shut eyes like lizard's eys.

I don't know what it is, this thing, in the ice. But I say to you, long afore I see this, I've look in some books. What books say want go hard for me, and the picture too, and yet, piece by piece, sometime I will read then. This name I bring out. Dragon.

Dragon, dull red as burnt fire and cloved over frost white, wings spread like a moth against a lighted candle, and the eys shut. Shut eyes. No moving. Still like dead. Dragon. Dragon.

This we tow.

The weather it held, with the sea in pleats and slow, and soft gray sky that has sun like a lemon slice, and by night a moon like a ghost.

Porpus teem through water, wet slick speckle, like cats. Then is later, and the packs of the flat ice drifting by, and above over us black head tar-nay flying.

All this while the dragon coil in the berg. No moving.

The twenty feet ice of the berg glister but never cracks. Each dayup, Corgen comes out with gun, and look over the berg ice, check.

I try say to him about the dragon in the ice.

Corgen won't say back. Three times I try. Third time he slap me hard in the mouth so down I fall. Beau pulls me away, but as I not any drink in me, I feel no will ter do nothing on this, only sad, like as when I child.

Nights though, he, me, and Beau we eat in the cabin. The wodka is still plenty. The guys from the tramper, they brung over a lot. Good best stuff, best than any ever drunk. Only tastes bit of kerosene, Corgen say. Who care for that? They drink, try to make me, laugh at me that I won't.

They sing some nights. So I with them.

In the ice it never moving. Eyes shut.

I think what eyes did it had behind the close, hot metal color lids. Were they like fire? Was fire what it breathed as the book say?

As Corgen won't speak, I ask of Beau, what did the officers on the other ship say of the dragon, when first they make Corgen and he to see it.

—They come out talk of prehistry, say Beau. —Say this like elephant thing in Rus, that was trapt in hard old ice. This one some kind of dynosar. But I see them dead dynosars in a show once. This out there nothing like them.

—Is it died? I say.

—For Christ, Pete, how fuck am I go to know? Looks well dead to me.

But the one who dies around then is Bacherly. I find him, as we was getting well up north, toward the world's top.

Dense white mist that day, and we to go very slowly cos for of the ice drifts, which you hear grunt and creak and squeak now near, and now far

off, but never see till close. And I go down with mess of meatpotato, and Bacherly is there and he's dead, with a red smear on chin.

Corgen come and kicks him to wake up. Bacherly don't take notice. We havta put him over side, and Ando say the prayer.

Some of the others have gutache too. But Corgen say they are all time drunken and that this is why, can't hold Rus wodka, it too good for them.

Then he say soft to me, —Or it that thing in there.

Meaning the dragon in the ice.

He say, —Some shitten disease carry on it. Those guys from the military, they jaw on, say too cold for any germ. How the fuck they knows? Couldna wait to get rid, and we the fuckfools to do muck work for them.

The stillness is like a dream.

When mist melts, I see three storms, three, four mile off north and east, boiling. But these never come up with Corgen's bucket. As if afraid to.

Tward nothard, that a strange place. Never had I been up so high. A terrible white place, with islands of ice that look to anchor, so steady they are stuck on the water. And the land what seem ter go to want draw near, white land, bare as a cracked china plate, but it's ice. And now we was to see animals about, the lolling seals and walrus. One time there is two like swords flash, fish with horns that fight in the sea. —Narhl, say Corgen.

He was been here afore and know such beasts.

We is both to forard, us, when he tell me that. He never at back of ship, save when at helm, or when he checks the berg.

We be have long days on this travel. I forgotten how many.

Then one day, just like that one I describe, Corgen and I is by the rail, when he lean over, and I hear he's throw up. When back he come, he have a smear of red on his lip.

One or two other of his men are sick now days on days, and all the rest belly rotten. Only I am not.

—Petè, Corgen say. —You never taste that filthy Rus piss muck, say you never?

—The wodka? Nar, Corgen. I swore I'd never, after Chalsapila.

—Thanks Christ, say Corgen. —Listen now, it's gotten be medcin in.

—What medcin?

—Don't you be bludy fool. What medcin ya think? To fuckkill us all. Govment do it. We haul thing up here, and all while drinken, and it gets hold. No bludy nine hundred dolla for us, but poisoned. Done for, the boatload ofn us.

I start to cry. He hits me. Then we hug hard, like long ago.

—Why they do it? I say.

—To sew up our mouths. Christ know they want that thing us be to tow kept safe and froze and none to find.

I turn my head, canna help that, look all the way of the ship, to where the ghostly berg she float there still on her cables, as if she follow us. And in the yeller blubber white amba of the ice, the dragon not moving, curven, and I see.

—Corgen, I say. —Corgen

—Now, say Corgen. —Listen close. The men and I are up to go the cab-

in. Have a final drunk of the piss muck, feel good one last, then I use the gun. Cap'n's job. And me the last.

—Christ. Nar, nar. We lay over tward the west, some settled place, get help.

—Too late, Peter. And beside, what to do of that in some settled place? That lizard. No, we go in cabin, we already done for. You'll hear some shots is all. Soon done. Leave it be. We two do say our god's bye here. Ye never had a stomache for a ruckus. Keep yor head, you'll make shore. Leave bludy ship. Take the boat. Leave ship and us and the thing. Sea is very calm and slow. You will make ter shore.

I never have words. Now neither, they don't come. He wring me in his arms, and then go, and the other men appearing and they go after, some even lifting a hand to me, and Beau give me a sorry grin, as they are leaving like for a new ship. The cabin door shuts.

I stand alone.

Above, over I the sails swing and sigh, and every side the pack ice grind in the waves. There's shout and cussing and a can thrown behind the door which make it to shake.

I stand alone till and I hear the shots. One, two, three. Then a bit. Then four. Which is he, my brother.

I set down on the planks and cry, all the ice and water and empty around me. He were never my brother in blood. Ma's son she allays beat, and I only her died brother's boy she beat too, but never me so hard and cruel as he. Hated me he shoulda. Never done that. My brother, Corgen.

The dark by this time is to be coming, and never is quite dark, nor never now quite day. But I go down to ship's end, and stare at the dragon in the ice. And I saw as I had when I look ahind just before Corgen go in to die, that its eys are have come open, open wide.

Its eyes not like fire, no, they look like an old piece silver I once see in a church, pale but tarnish of black, and shine behind.

Very slow, slow as think, they seem to move. The rest dead still, no breath, no trembler of leg or head. But just these eyes move this and that way.

All Corgen and crew be stark dead, they, and this have awaken sure, and not dead, there alive in the white amba of the ice.

And then its eyes look down, at me, so far down on the planks of the ship. The eys are to stare. And I know it have never, in all the time of its living days afore seen a thing like I am. As I, in all my living, never saw a thing like it but in a book I proper couldna read.

All around the dark drop like snow.

When I have the things set right, I beginning what now I must.

So long a great while, the steel tooth works on the cabling, and the green sparks fly. I look up and they are reflect like thoughts in the old silver of the dragon's eyes.

All night I am take to cut the cords that bind the berg to the stern of Corgen's ship.

The big heat of cutting make me sweat, and make too the berg true sweat, and near the half dawn time, I see there are a crack all up the



crystal ice, all splintery and furred white, and it leak, drip, drip, away in the cold area.

The dragon watch all that.

No moving, but only the eys.

When part of the sky lift to the east, last of the iron cords smokes and screams off and crash down in the water. The berg shudder. There is wind now, blow fierce straight out of the sun, and drive Corgen's bucket over to port, to the west, and maybe we are to go to smash on the ice there. But I look back, and I see the berg drift now, free, and how the heat from the cutting I was made get ice to run down, and the sun catch on these flows, and sudden a chunk of the old, old ice fall out and into the water.

Then was a horrible circling tide that hides up in the ice packs, and hauls ship away, with the wind too bending her, so she lie to her side, and the great berg go smaller and smaller. But I think of its eyes.

I go down in hold, where Bacherly died the first. I cover up me in his blude-mark blankets and sleep, for there's now no more of any kind I can be to do.

She run in, time later, on Spalt Island, where the codfishers have a camp town of huts, and they come take me from the ship to their fires. Later we bury my brother and his men in the deep inland snow. An old man he say words over them from the Bible. A young woman of the older peoples here, with hair black as oil, she rubs my hands in her square, hot, fat hands, to bring me warm. She's kind, the black haired woman.

The fishers go out and come in again in their boats with the nets thrashing with the codfish. But never have they to say that they see any odd thing.

Berg must of drift north and froze, or away again to south, or west or east, and burst like a frost glass on sharp wall of sun. Perhaps and too, what is in there maybe allays was dead, under the ice, its eyes only to open as sometimes a dead man's will, or he make groan or sigh, even though he dead as stone when you check him, but it's as you picken him up the final air go out. The men here say they have seen like this in shark. And too, it is like dead Beau done, yet he is rotten. But Corgen never did.

Long while since, I am on this island.

I am walking out to the land's edge, where ice thick as twenty feet. Stand there, I, and see the sky and the water. I think and think, but no word comes. Can such thing as a dragon come back from so far past? Such a thing as that, so pale metal red, so long shut in its prison of frost glass, just the sparks of the cutting free and the Artic sun's shine to warm it, just the tides to push it here or there, back into the cold on the world's roof, or down into the melt of the thaw. Or down otherways under the top of the sea.

The black haired woman kind to me, like they kind to the dead here. Ask no question.

I think all hour of all day. And night when I wait for to go sleep. Of Corgen shut in the snow and dragon in the berg, and of that in me that is me, clove in the ice, gone out like a match. Forever and tomorrow and forever.

The black hair woman kind. ○

—from an idea by John Katiine

# THE CHIMERA TRANSIT

Jack Skillingstead

**The author reports a particular fondness for the short fiction of John Cheever and would like to make it known that the present offering's title, if nothing else, is a nod in that gentleman's direction.**

**A**fter sex the stranger, whose name was Rebecca, cuddled under my arm. I transmitted serotonin—enough to raise my mood above depression without inviting further arousal. The stranger moved against me, her leg slung over my hip, her hand on my chest, breath in my face. She had a mouth like Lynn's, the shape of it. I waited until she was asleep, then carefully extricated myself from her body and her bed.

I walked home in the rain. It was past two AM. The gloom came upon me again. Looking up, rain anointing my face, I transmitted a dopamine and norepinephrine brain cocktail. My mood soared, and for a moment I was infatuated with the sky, as I used to be. A distant roll of thunder reminded me of the Outbound shuttle launches I used to watch with my dad when I was a kid, daydreaming stars. My mind felt nimble. Jazzed. City lights underlit the cloud cover. I thought of starships, which led to my father and the Big Bang (weapon discharge in the basement), which led to Lynn, and I wondered what she was to me.

A woman laughed. I looked across the street. She wore a long coat and floppy hat and she was with a man, hanging on his arm, ducking. A green Tinkerbell Flirt hovered around her, flew away, returned. The man reached out and captured it in his hand. They bent over it together, their faces illuminated by a green flicker. I heard her say, "It's beautiful, I love you!" She moved her face under his and kissed his mouth. I looked away.

What Lynn was to me: gone.

The next evening as I was dressing to go out a fairy light hovered in

close to my window. I stared at it, my shirt hanging open. I thought of half a dozen women who knew my name and could access my People Finder code. But none of them possessed a romantically flirtatious disposition. They might call, or pop me an EyeText on my retinal repeater. Fairy Flirts were kid stuff. I whacked the window with a rolled up *New Yorker*. The Flirt drifted back, flimmering wings making a ruby nimbus in the rain.

I sat by the window in a coffee bar on lower Queen Anne, sipping espresso and reading a flashprint copy of a faux Updike novel. The style and plot were perfect Updike (Rabbit in the twenty-second century) but thin under the surface, like all program-written books. I read the sentences and listened to the words in my head. It improved when I transmitted some phenylethylamine into my limbic system. A boost of joy surged through me. The words glowed. Analog or not, it didn't matter.

A pretty girl sitting alone at the next table suddenly ooo-ed in my direction. Her hair was styled into glossy blue spear points. I tried a tentative smile, but the ooo wasn't for me. Ruby light shimmered on the other side of the window.

"You have an admirer," the pretty girl said.

"So it seems."

I stowed the fake Updike in my overcoat and went out of the bar. The Fairy did a couple of loops around my head. I was conscious of people watching me through the window.

"Okay, okay," I said to the Fairy. It darted off. Too fast if it expected me to keep up. The pretty girl inside the bar made a shooing motion at me. It was idiotic, but I started after the Flirt.

Really, it seemed determined to evade me. I picked up the pace. The Fairy veered down an alley. It was running out of juice, skimming low, ruby flimmer reflected in rain-stippled puddles. I splashed after it in hot pursuit. It tried to soar up the side of the building on my right, winked out suddenly and dropped like a dead clinker. I caught it in my hand.

I looked up at the lighted and unlighted windows. The little Flirt was warm in my palm but the rain was cold and I'd left my umbrella in the bar. I started to walk out of the alley. A window opened.

"Hey—" Tentative female voice, almost apologetic. A slight figure backlit by the apartment light.

"Yeah?"

"That's mine." Some kind of accent. Eastern European? "Toss it up?"

I could have, maybe. She was on the second floor. But I shook my head. "Nope."

Her name was Anca. Romanian born. She was fluent in three languages—four if you counted an obscure source code imbedded in a thousand or so of the early DAT model implants. The tech in those old implants was so clunky that you couldn't remove them from the host brain without risking serious tissue damage. I knew these facts because I knew Anca, slightly. My partner at NanOptions, Dario Crow, had one of the old implants. *Dario* was old, that's why he had one. He and my father had been partners. Until dad's single-minded pursuit of a workable neuro-stim device collapsed under the

weight of his misconceived approach and bankrupted the first incarnation of NanOptions. Twenty years or so later I came along, little Jackie all grown up and twice as clever as his old man. Or so I thought.

Anyway, Dario introduced me to Anca, who was helping correct a glitch that had occurred between his DAT and his more contemporary retinal repeater. That was weeks ago.

"Hey, I know you," I said when she opened the door to her apartment. She smiled shyly and didn't meet my eyes.

"And I know you too, Jack Porter."

"Ah, here's your Flirt." I handed it to her.

"Thanks. It's not really mine. I borrowed it. How can I afford such silliness? And I asked Dario for your People Finder number, for the little Fairy to know where to go. So you see it's a grand conspiracy."

"You think it's grand, huh?"

She giggled, quirking her lips as if the giggle were a bug that wanted to get out—a bug that she was fond of keeping in.

"Would you—?" She opened the door wider.

I stepped past her into the room. I'm no giant at five ten, but Anca was boyishly small, almost frail and no taller than a twelve-year-old. She looked starved, but cooking smells wafted from the efficiency kitchen. Something boily with cabbage. Her apartment was like the rest of the building. Old, run down, reasonably clean, and too dark. It was the brown carpet and all that stained wood. Lamp light absorbed into it. The overall effect was a little depressing. I resisted transmitting.

"Some wine?" she said.

"Sure."

When she handed me the glass she met my eyes briefly, then looked away again.

"That Flirt. I'm not for fads, I mean I would never—"

"It's okay," I said.

"Do you want to watch the review?"

"Absolutely."

It was one of those cheap liquid screens. It rippled like wind over a puddle, then a jerky image appeared. Me waving a magazine, being dive-bombed, etc. Anca suddenly turned it off.

"Oh, well," she said.

"What?"

"It's so silly. I liked you, you know. So—"

I touched her hand.

She clung to me in the dark of the bedroom, her boyish chest crushed against me. I could feel her bones. Her fingers were cold. Rain popped on a fabric awning outside her window. *Don't go*, she'd whispered before falling asleep, as though she knew me.

I caused endorphins to occur and eventually slept.

She caught me at it over orange juice the next morning. Caught me adjusting brain chemistry.

"What are you doing when you close your eyes like that?"

"It's a neuro-stimulation device." I tapped my forehead with two fingers.

"Oh. Dario told me about that. You're going to make millions, yes?"

"Maybe. We're at the experimental stage. I'm the guinea pig. Just like your old DATS, only this thing can be easily removed. NanoBotz lay a gossamer web over the brain, attaching to axon fibers. Consciously directed electrical microbursts release chemical molecules from the neuron sacks at the end of the fibers, transmitting them to receiving neurons. It's great tech."

"Hmm." She bit into an apple slice and chewed slowly.

"What?"

"How do you know what you really feel?"

"It's not that dramatic. It just allows you to have more of what you already possess."

"It sounds a little terrible, though."

"God, I hope not. It was my dad's idea to begin with, only he never really got it off the ground."

"Okay," Anca said. She put down her half-eaten apple slice. "Do you want to see something with me?"

"Sure."

It was a little museum of oddities near the Pike Place Market. She led me to a trembling holo of a Martian desert. A sign with a down-pointing arrow said: LISTEN. Anca nudged me. I leaned into the aural sphere and heard . . . wind. After a moment I drew back and made a question-mark face. Anca shook her hands like she was trying to dry them.

"It's the wind on Mars."

"Okay."

"From the first times, before there were any people. From a robot lander. A digital recording. So *old*."

"It's nice."

"Oh, you're dense." She giggled, quirked her lips, holding in the happy bug. "It's the idea. The way it was so distant you could never be there, the way the wind was blowing on another planet and there was only a little robot to record it. A whole empty world. It's *romantic*, Jack."

I leaned forward again and listened to the lost romantic wind of Mars.

"Who is she?" Anca said a month later.

"Who's who?"

We were walking in bright October sunlight in an urban park not far from NanOptions' offices.

"The woman, the one you can't let go," Anca said.

"Whoever said—"

"Shhh."

"Well."

"Of course you don't have to tell me."

The sidewalk was plastered with wet leaves gone an ugly dun color.

"It's irrelevant who she is," I said. "And besides, I have let her go. Mostly."

"You haven't."

I scraped some leaf slime off the path with the heel of my shoe.

"Why don't you call her?" Anca said.

"I can't."

"Why not?"

"She's Outbound to Tau Boo."

"Oh." Anca became thoughtful, then said, "Oh," again.

"Yeah."

"And you didn't go with her."

"I couldn't. You only get one shot at the qualifying exam."

"I see. And you failed but she passed. How terrible, but why didn't she stay with you if she loved you? Why—"

"Anca. I didn't fail the exam."

"No?"

"No. I haven't taken it yet."

"But why not?"

I transmitted and felt better about not answering.

"But how long?"

"Since she left? Two years, almost."

"Two years," Anca said.

I transmitted until the two years didn't matter.

She came back to bed with two glasses of wine. It was that uncomfortable stage in the relationship. The stage where I wanted to go home by myself even before the sex. Transmitting oxytonin helped by producing hormonal arousal, but on the down side was a concurrent feeling of emotional attachment. Anca handed me my glass and slid under the covers with me.

"I lost mine, too," she said. "But it happened in a different way."

"Lost your—?"

"My beloved. Perhaps I was mistaken and he wasn't my beloved, or supposing I wasn't his is more truthful. He said he loved me, from all our talking and virtual intimacy, while I was in Bucharest. But when I came, at my own expense and using everything I had, things were different. So. I warned him I was not what he might want in a woman. This happened in San Diego. He flew away to Tokyo and stopped calling. I did make a fool of myself but it didn't help. When my money was almost gone, I began offering my DAT skills on the Ethricnet. That's how I came to Seattle after my beloved abandoned me."

She had finished her wine. She reached around to put her glass on the end table and it tipped off the edge and fell empty to the carpet. Her reaching arm, the way her shoulder blade slid under the skin, like bird bones.

"Oopsie," she said. And: "Aren't you going to drink that?"

I gave her my glass.

"I challenge you to something," Anca said.

We were drinking Guinness in an Irish bar called McGerry's and it was a mistake. The bar, not the Guinness. Lynn and I had spent one of our last nights out in this same bar. McGerry's was saturated with her presence.

"What kind of challenge?" I asked.

"I challenge you to spend one entire night with me and not adjust your chemistry to do it."

"Anca."

"Never mind. I know you can't."

I sipped at my second Guinness and resisted an urgent impulse to transmit.

"You are never in the place you are," Anca said.

I smiled. "I'm here right now."

She shook her head. "You are always thinking about someplace else or somebody else or some other time. There *is* no now for you, I believe."

"That's ridiculous," I said.

"I think you are too afraid of making even one permanent decision. You always want to take it back, whatever it is, or not give it in the first place, so you can think of the possibility of giving it. Oh, I'm not making sense, am I? What are you doing giving this black beer to a little person?"

Around three AM Anca woke up next to me in bed. I was staring at the ceiling, not transmitting, my arm loosely around her. She rubbed her eyes. "Aren't you going? You always go lately."

"No, I'm staying."

"You don't act like it."

"What do you mean?"

"Whenever you stay you are like this," she said, and she flung herself around on her left side, facing away from me and as near to the edge of the mattress as possible.

"Hey, come back here."

"And why?"

"Because I'm not done with you yet."

"You can't make me," she said.

I grabbed at her waist, which must have tickled. Anca shrieked and jerked away but had nowhere to go but the floor. She didn't make a very big crash. She said "Ouch," and we both laughed, and I pulled her back onto the bed.

You aren't allowed any enhancements when you take the Outbound exam. They want the unadulterated best and brightest. So one day an army of NanoBotz disconnected and devoured my neuro-stimulation web and then dutifully dissolved into my blood, eventually exiting in a stream of piss. A month later I arrived at the Outbound Center with a dozen other hopeful-but-not-too-likelies. Exam questions routed directly to our retinal repeaters. Two hundred questions, each set tailored to the individual's specialties, mine being nanotechnology and biochemistry. At the end my score was instantly tabulated.

I stood on the sidewalk, head craned way back, staring up at the copper face of the Outbound Center. The sky was clear and twilight was upon the world. The first stars had begun to appear. I thought of lying on the roof of the house with my father, watching the shuttles go up, their propellant streaking goblin green across the sky "There are other worlds now," he had said to me, referring to the advent of Kessel's Outbound Drive. "And if you're good enough you can go to them," he added.

*If you're good enough.*



Almost pathologically self-critical. In Dad's view, I guess, he hadn't been good enough to make NanOptions a success. He poured his heart into it, and when it failed he accounted his life a failure, too, and put an end to it. That was certainly a greater failure as far as my mother was concerned. After a year or so she started dating. Indiscriminately.

So I finished growing up mostly on my own, and eventually I figured out the neuro-stim thing for Dad. It's always easier to make someone else's dream work. Insurance money helps, too.

Anca, who didn't have a mouth like Lynn's, sat as near the fire as she could, huddled inside my overcoat. She was always cold. The fire was in a floating bar on Elliot Bay called Aquablue. The flames cycled through a chemically dictated rainbow palette. Management dialed the walls and floor to vitreous invisibility. Anca and I and the fire and the tan leather sofa thing all seemed to float upon the surface of the bay. Maybe it was that choppy green water and the steely cloud scud that made her feel so cold.

"I've been thinking about your lost one," Anca said.

"Hmmm."

"I think you like her out there where she can't touch you."

"There's some truth to that."

Anca held my hand. Her fingers were ice cold.

I remembered sitting on this same sofa (it was a sunnier day, though) with Lynn. This was where she told me the results of her Outbound exam. Lynn's hands were always warm and they had been, that evening, especially warm in the memory of a thousand intimacies. I'm sorry, she had said, but you're stuck in your fear and I can't wait.

Anca was on her third glass of wine. After a while I told her the results of my Outbound exam. Her grip tightened on my hand. And when I looked into her face and told her about my one irrevocable decision I could transmit nothing. Nothing.

Because Outbound was the only truly irrevocable decision. Once Outbound there was no returning. In a peculiar way, Outbound ships are like Ouroboros, self-consuming. They measuredly convert their specialized mass to energy, feeding it into a tachyon funnel, *becoming* the funnel. By the time you arrive in the Promised Land you barely *have* a ship anymore.

There is a longish period while you transit out of the solar system. A period in which there occurs more than enough time to recall and reform the recent past, to come up with stuff like lips that quirk to hold in the happy bug, and to notice that even in the absence of artificial neuro-stimulation, feelings of attachment persist. There is also time to remember the things you tried not to remember otherwise. Things besides the shape of a mouth and the sweetness of a long confessional summer. The way a person abandoned you, for instance, after you surrendered all your secret pain. Even after that. The transit between Earth and the interstellar gulf, then, is the vacuum between Chimeras.

Then the Outbound Drive kicks in. The stars gather into a whirling funnel. A knot tightens under your heart, and the ship begins to devour itself. ○

# A PORTRAIT OF THE ARTIST

Charles Midwinter

**Charles Midwinter teaches high school science and lives with his wife and two children in Minneapolis. When he isn't teaching, he enjoys racing around the lakes on his bike, reading and writing fiction, or playing Go, the ancient Chinese game of strategy. Strategy and a possible interest in screwball comedy seem to be in evidence in "A Portrait of the Artist"—the author's first professional publication.**

Chris is sitting in his chair, looking at the canvas propped up in the center of his apartment. He spent the whole day stretching canvas, but he has no idea what he wants to paint. His arms are crossed against his chest. His face is slack, tired, uninterested, but he makes himself stare.

On the walls hang the many pieces from his pixelism period. Imagine pointillism, but on an absurd scale, and that's pixelism. In pointillism, it's okay to vary the spacing of your dots, and various effects are achieved by doing so. In pixelism, this is strictly prohibited. The dots have to be in a near perfect matrix, mimicking historical computer monitors. Eight hundred by six hundred is most common, although a few mavericks have undertaken higher resolutions with success.

On the wall is a pixelism self-portrait. Chris painted it two years ago, and it has already begun to look like someone else. The lines in his face are deeper than they were then, and he has lost weight. In the portrait he has good color. There is fullness in his cheeks and lips. Now his cheekbones nearly jut out, and he's becoming pale. His blond ponytail has begun to thin.

He stops staring at the canvas and rubs his eyes with his palms to scour the pain from them. He stretches, arching his back and tilting the chair onto two legs. He can see the rafters exposed in the ceiling. There are things living there. He knows every nest and web. There's the brown recluse he's too afraid to touch. There's the spot where the mice come in, bolt across like circus performers, and disappear back into the wall.

Sometimes, there are bigger things up there, too. There's a corner where something strange will scurry around once in a while. It's a little like a squirrel, only smarter. He's heard stories about these strange new animals before, but a week ago he saw one, and has been eagerly awaiting its return ever since.

His doorbell rings. It's the kind that was invented a hundred years ago, an actual ringer in an actual bell. Every time it rings it is testament to a long line of shitty landlords. He tries to ignore it sometimes, is trying now, but that first design was a good one. It's loud and grating, hard to tune out. So he rocks the chair forward onto all four legs, and goes to answer the door. He leaves the apartment, and walks down a yellowish hallway. The last apartment on the left smells like pot. At the end of the hall is a stairwell of concrete that also smells like pot. He trots down the steps with echoing clack sounds.

He walks down a final sick-green hallway and he can see someone through the glass front doors. On the front step is a girl in black. Flashes of light wink in and out of existence on her pale skin as she turns, her many piercings catching the light. She has tattoos all over. Some of them are interesting up close, but from a distance they make her look dirty. Not that she *isn't* dirty. Chris sometimes wonders if she ever washes her black hair. The matted dreads always look the same, down to the rusty clips that hold them in place.

He walks through the first door to the mailbox area, and lets her in.

"Hey, Chris," she says.

"Hey," he says.

She walks past him, down the hallway and into the stairwell. He starts after her, but by the time he reaches the stairwell, the door has already closed. So he opens it again, and when he gets into the stairwell, he can hear the door to the other hallway swing shut. He shakes his head. Not for the first time, he wonders how she can be so damn quick without hurrying.

By the time he gets to his apartment, she's sitting in front of the door. He walks up to open it, but she doesn't get out of the way. He waits for a moment, but she just sits there.

"Wanna go inside?" he asks.

She's spaced out, thinking about something.

"Lanna, let me open the door."

She sits there, stone-still, staring right through his legs. He nudges her shoulder with his knee, and she finally scoots out of the way. Apparently she wants to finish her thought, though, because she doesn't follow as he enters.

His feet hit the hardwood floor, and it lets out a creak. Chris hears something rustling in the corner. It looks like a squirrel, only larger, and it is scaling his brick wall. It isn't climbing the wall like a normal squirrel. It is too cautious about picking its footholds. Not that this compromises its speed. It has nearly reached the ceiling.

Chris looks at it carefully, trying to commit as many details as possible to memory. The last time he saw it, or one that looked a lot like it, it had unscrewed the lid from his peanut butter.

As the creature reaches the top of the wall, it leaps onto a rafter and

perches there for a moment. For the first time, Chris is able to get a look at its hands. They look like squirrel paws. Their tops are furry. Their palms look tough—good for tree-grabbing. The digits end in pointy claws. But there is one strange thing about them. From the inner side of each paw, a curved, white claw protrudes, exactly where thumbs would go . . . *if* squirrels had thumbs. Chris has already stopped thinking of the creature as a squirrel.

The creature flexes its paws, its bony thumb-claws clacking against its finger-claws. It runs across the rafter and into a hole in the ceiling, leaving a wisp of the brown recluse's web fluttering in its wake.

Lanna walks in.

"You missed it again," says Chris.

"What?" she asks.

"That thing. It was here again."

"What are you talking about?"

"That big squirrel thing. It ran up the wall, and I think it has thumbs."

"Oh, the peanut butter thief."

"Yeah, it has thumbs. Very strange, I think. Well, maybe not thumbs, exactly, but bony things that it can use like thumbs."

"I don't know why I keep missing it," she said, shaking her head. "You should get a picture." Chris gets the idea that she doesn't believe him.

"Yeah, I should," he says, and takes a seat in his chair. Lanna goes and sits down on his mattress in the corner. Her black leather bag is studded with pointy metal. Out of it, she pulls her computer and all the strange peripherals she connects it to. There are the goggles and the gloves. The olfactory tube and the earbuds. Strangest of all, though, is the chest strip. She sticks it to her cleavage. When there's some particularly important information coming in, it will tickle or burn her, depending on priority.

"I can't wait for the day when they can give me all my intel directly through my skull," she says. "I'm getting tired of lugging all this shit around."

Chris stares at his canvas while she gets her gear on.

"They almost followed me here," she said.

"Who?"

"The spooks," she says.

"Oh. They still after you?"

She can tell he doesn't believe her. "Yes," she says. "They are."

"Well," he says. "You're safe here."

"That's sweet, Chris," she says. When she smiles, the metal pieces in her cheeks all point outward, like the spikes on a blowfish.

There is silence as she gets the rest of her gear on. When she is finished suiting up, she begins waving her hands around in the air. No doubt she is as attuned to her other world as she is deaf and mute to this one.

Chris rises from his chair and goes to get his paints. In a few minutes, he is in a smock. Soon colors are moving across the stretched white.

In a few hours, Lanna comes to. She's finally starting to feel tired. When she peels her gear off, she is numb in a few places. She'd rub them, but she'd probably scrape her hands on all the metal.

Chris is sitting in his chair again, looking at the canvas, and Lanna feels a bit sorry for him. It looks like he hasn't moved since she put herself under three hours ago. She goes over to talk to him, but, as she gets closer, she notices that there's color on the canvas. He has actually painted something.

"Chris!" She skips around to the front of the picture, and lets out a gasp. "It's hideous! What the hell is it?"

"It's that thing I told you about," he says. "See the thumbs?"

"Those don't look like thumbs. They look like bones or something."

"Yeah, they must not be very developed yet. But I guess they're good enough to open a jar of peanut butter."

Lanna looks at the face of the creature that Chris has painted. "It really does look smart," she says. "It looks like it's thinking." After another moment, she says, "I don't trust it."

"I dunno," says Chris. "I kind of like the idea that there's other intelligent life out there."

"Out there, as in outer space; that idea I like. Out there, as in just outside your apartment, that creeps me out."

"I don't mind sharing my peanut butter," says Chris.

Lanna inspects the painting again. "It looks real. Is it more pixelism?"

"How do you know it looks real? You've never seen it."

"Believable I mean. It looks believable."

"Yeah, its pixelism. The last one, I think."

"I always liked that style," says Lanna.

"I know," says Chris, and he smiles at her. He always thought that she had good taste in art, even if it didn't transfer over to the world of fashion. She blushes a little when she notices his smile.

"I have to go in a few minutes," she says. "I've got a couple of errands to run. But I was wondering if you'd do me a favor first."

"What?" he asked.

"I want you to check around outside, just around the outside of the building before I go."

He thinks about being a kid, and having his dad check for monsters under his bed, in his closet, etc., before bed, and he worries a little about Lanna. Maybe she's been taking too many stimulants. "Yeah, I'll check," he says. He gets up and walks out the door.

It is still smoky in the halls, but he takes his time walking anyway. It feels good to have finally painted something again, and he savors the feeling. He thinks that he'll just walk around the building a couple of times, come back, and let her know that everything is safe, but as soon as he steps out the front door, he runs into a suit. The guy is white, bald, and has some kind of weird earbud. It could be a hearing aid, but probably isn't.

"Hey," says Chris as he steps onto the concrete. "Are you the new tenant?" he asks, knowing that he is most definitely not.

"No," says the bald guy in a suit. "I'm just waiting for a friend."

"Who?" asks Chris.

"No one you know," says the bald guy.

"I know everyone here," says Chris. "I'm the building supervisor."

So far the bald guy hasn't really been looking at Chris, but suddenly he is. The difference is palpable. "You're not leaving me much room to be

vague," says the bald guy. Obviously, the bald guy does not want him to get into specifics, and, suddenly, Chris is not sure that he wants the bald guy to get into specifics either.

"Jesus," says Chris. "I'm just trying to be friendly."

"I'm not here to be friendly," says the bald guy. His eyes get a far-off look all of a sudden, and Chris thinks he might be listening to something through his earbud. Then they lose their far off look just as suddenly and focus on Chris. "Nice meeting you," says the bald guy. He walks away from the step and stands at the curb. A black van comes to a silent stop in front of him. Its sliding door opens, momentarily revealing a small room full of electronics that Lanna would drool over. The bald guy gets in the van with a practiced step, and the door slides noiselessly shut behind him.

Chris stands and watches the van drive off. Although he's trying to make out the plate, the characters seem blurred, as if he's looking at them through a layer of hot air. When the van has driven out of sight, he walks back inside to his apartment. Lanna is eating a peanut butter sandwich.

"Spooks, you said?"

"Yeah, did you see any?"

"Yeah," Chris says. "I did."

"Christ. How long do you think it will be until he's gone?"

"He's gone," says Chris. "But I don't know for how long. What the fuck did you do, anyway? Who are these guys?"

"I told you," says Lanna. "Spooks. You know . . . CIA."

"Oh," he says.

"I don't know why they're after me," she says. "Maybe that genetic screening database I hacked."

"Yeah, that could be," he says. "They probably wouldn't be too happy about that one."

"Or it could have been that malware I released last year."

"Yeah," he says. "Coulda been that too, I guess."

"I guess I'd better get going," Lanna says. "See you tomorrow?" For a moment she was a metal blowfish again. How could Chris not smile at that?

The next day, Chris is sitting across from Rico. They're on the patio of a trendy restaurant. Chris is having a burger with some strange shit on it. They put flimsy, sweet onions on, and some strange cheese. It smells horrible but tastes okay.

Rico is having a liquid lunch. Chris grimaces every time Rico takes a drink. Two is way too early for nearly undiluted gin.

Rico's clothes look worn in the right places, like the knees and elbows. He's wearing sunglasses, too, even though it's cloudy.

"So what is it again?" asks Rico.

"I dunno what it is," says Chris. "But it looks a little like a squirrel."

"I see. I have to say, I don't find it very compelling."

Chris looks a little bit offended. "Couldn't you see the intelligence in its eyes? What isn't compelling about that?"

"It just looks like a very strange squirrel, Chris. You got my hopes up over the phone, but that's really all it is." Rico leans over to take a sip of his martini, and his waxy brown bangs nearly dip into it.

"It's the next step in squirrels, the next model. It has thumbs, for Christ's sake."

"My point is it won't sell." The martini is bottoms up now.

"You won't even put it in the show?"

"I can't spare the wall space, man." A green olive disappears into Rico's thin lipped mouth. His cheeks barely ripple, he chews so delicately.

Chris shakes his head and takes the last few bites of his burger. He's starting to think maybe the cheese isn't so good after all.

"Have you got anything a little more abstract?" asks Rico. "I'd love to put something up for you, but pixelism is just very out right now."

"Nah," says Chris. "It's the first thing I've done in a while."

"How have you been making a living?"

"Temp work mostly." Chris' face goes dark.

"I hope things turn around for you. I wish I could offer you a space at the gallery, but—"

"You *are* going to offer me the space," says Chris with certainty.

"I told you I can—"

"I'm calling in that favor," says Chris.

Rico just nods. "Do you have some time right now to see the gallery with me and figure out where you want to hang it?"

"Yeah."

"All right."

Neither is talking. Eventually, the waitress comes. Rico pays the check.

They get to the gallery. It used to be the warehouse of a big cereal manufacturer. There are still two statues of cartoony breakfast mascots standing guard by the doorway. Chris thinks that one's name is Smack and the other is Tyrone the Tiger, but it has been a long time since he watched Saturday morning cartoons. The lock is old, so Rico has to fumble with it a little to get it open. There's an art to it. He almost has to feel out the pins, has to almost pick it with his key before it will unlock. Finally there's a click. "I think you'll like this collection," Rico says. "There's a lot of innovation here." He opens the door.

The inside of the gallery offers a jarring counterpoint to the cereal factory exterior. The walls are all white, and lit by well-placed incandescence. As far as technology has come in two hundred years, there is still no substitute for the soft lighting of a hot tungsten filament.

Chris gets a look at what's on display, and realizes once more that he and Rico have very different opinions about art. "So, by innovation," says Chris, "what you really meant was condiments. . . ."

There are paintings in mustard, paintings in ketchup, paintings in relish. There are sculptures made out of butter surrounded by complex cryogenics. There is a mayonnaise collage. One interesting piece was made by angrily hurling a bowl of lobster bisque at the canvas. Chris stalks among them, through the rows of rooms with white walls, wondering, not for the first time, how these things manage to catch on. He can understand a single maverick taking some condiments to the canvas, or even two giving it a try, but three, or four, or ten, or thirty? How does it happen? Chris thought that maybe it was further proof of the one hundredth monkey effect.



"What do you think?" asks Rico. "Have you ever seen anything like it?"

"No," says Chris honestly. He looks at the price tags. "Does this shit actually sell?"

Rico looks a little offended. "Of course it does. Do you think I'd hang them in here if they didn't?"

Chris knows he wouldn't. "So where do I get to hang mine?"

"That's up to you, old buddy," says Rico.

Chris doesn't hesitate. "Move the bisque, and put me there," he says.

"Done," says Rico. "How soon can you have it here?"

"I'll try to get it here tomorrow. It'll be dry by then."

"Fair enough," says Rico. "I'll be here."

The two shake hands. Chris turns his back on the condiments and goes home. Rico stands there for a time, looking at the bisque, disappointed, because even if moving it will satisfy Chris, it won't satisfy karma.

The next morning, Chris wakes up to a strange noise. It's a weird popping sound coming from outside his window. He rolls off his mattress and puts on his pants, calculating silently that they'll be good for another two days before he has to wash them. Then he goes to his window and sticks his head out. On the building's brittle yellow lawn, two kids—maybe twelve or thirteen—are firing an air rifle. They're black. One has tight braids, and the other's hair is cut short. They have to pull up their oversized pants every so often, and their huge sleeves make their forearms look deathcamp-thin.

Curious, Chris heads outside. As he walks down the hallway, his body cuts a swath through thick tobacco smoke. Once he gets outside, he can see that the kids are aiming at the roof. The yellowish brown grass crunches under his bare feet.

"What are you shooting at?" he asks them.

"Squirrels," says the short haired one.

Chris shifts his gaze to the roof and sees them. One of them is crouched low, over the body of another. Its paws and bony thumbs are grasping at the body, trying to pull it farther onto the roof and out of the air rifle's line of sight. It chitters loudly. The sound reminds Chris of crying. It strains itself to drag its friend to safety.

"Stop it," says Chris.

"This is *his* fucking rifle," says the one with short hair.

"If you don't listen, it's gonna be my rifle in a second."

"You take my rifle, and my dad will come after you," says the kid with the braids.

Chris grabs the rifle out of the kid's hands. The other one grabs for it, and Chris backhands him across the face. The smack is audible.

The kid screams. He's not crying, but there are angry tears in his eyes. The other boy is keeping his distance, looking ready. Chris pegs him for the smart one.

"Don't fuck with those squirrels anymore," says Chris. He turns to go back inside, and sees Lanna on the front step. She looks concerned. Chris glances at the roof again. Nothing is there. The squirrel-things must have gotten away safely.

He walks over to the door, opens it, and heads inside. She follows down the smoky hallways.

"They were shooting at those squirrels," Chris says.

"You didn't have to hit him," says Lanna.

"He should have listened," says Chris. "I just asked him to stop shooting at those squirrels."

"Chris, they're just squirrels," says Lanna.

"They have thumbs. I think one of them was crying."

"I didn't see anything up there," says Lanna. "I'm starting to worry about you, you know." Chris shakes his head. They're at his apartment.

"Do you want some coffee?" he asks.

"Sure," she says, and they go inside.

Chris makes coffee in his kitchen corner, and Lanna talks about being stalked by spooks. "They're getting more and more daring," she says. "They don't even care if I see them following me."

"I still don't know why spooks would be following you," he said, pouring two cups of black. "Wouldn't they be feds or something?"

"I'll take cream," Lanna says, "and sugar."

"I don't have either."

"All right," she takes the cup of black coffee he holds out to her. "And no, they wouldn't be feds, because I'm an *international* criminal." She sounds proud of it.

"Oh," says Chris. "I see."

Some of the metal in her face fogs up a bit when she drinks coffee, mostly the spikes. The studs closest to her face are too warm for the steam to condense. She's wearing black mascara and eyeliner.

"I'm getting scared," she admits. "Can I hang around with you today?"

"Sure," says Chris. "If you don't mind running an errand with me."

"What errand?" she asks.

They're waiting at the bus stop. Chris has his canvas rolled up in a cardboard tube under his arm. Rico's gallery is two transfers away, but it's going to be a nice ride. Lanna and Chris are enjoying the day. It smells like fall, crisp and fresh.

Lanna and Chris breathe in the fall air at the bus stop, and, in their relaxation, they don't notice the two boys rapidly approaching on noiseless electric bikes. Before Chris can react, they whiz by, and grab the cardboard tube. They yell something as they bike away. It sounds triumphant, profane, but beyond that Chris can't really understand what they're saying.

"What did they say?" he asks.

"I dunno," she says. "But they sounded pretty excited."

Chris sits down on the curb and picks up a brittle red leaf. "Shit," he says.

"Yeah," says Lanna. "That's pretty raw."

Chris crushes the leaf in the palm of his hand. "Well," he says. "At least I know where they live."

"Yeah, they'll probably give it back to you if you return their air rifle."

Chris crunches another handful of leaves and sprinkles their fragments onto the concrete. "Shit," he says again.

"You hungry?" Lanna asks.

"Yeah," he says.

"Let me take you out for lunch," she says.

"Okay," he says. "I'd appreciate that."

A few minutes later, the bus rolls up to the curb, and they get on.

It's the same restaurant he went to with Rico the day before. He decides not to get the burger this time. "What's good?" he asks the waitress.

"The seared tuna is great," she says. "We also have a nice bison filet." She's thin and pretty. He wishes he were wearing clean clothes.

"I'll take the tuna," he says. "And a double Jameson."

"How would you like that?"

"Neat," he says. "I'd like a coffee, too."

"And for you?" she asks Lanna.

"I'll take the bison fillet and the tuna," she says. Lanna always eats a lot. All the stims make her metabolism abnormally high. "And give me a bowl of the ostrich soup, too."

The waitress raises her eyebrow, and looks like she's about to say something.

"I'm hungry," says Lanna.

The waitress tilts her head slightly, as if to say okay, and goes to put in their order.

"Can I taste some of that soup?" asks Chris.

"Of course," says Lanna, doing her best impression of a blowfish. Chris smiles.

"So, I'm kind of fucked," says Chris. "I need money . . . bad. I'm gonna have to wash dishes pretty soon if I don't get that painting back."

They mull it over for a minute. "I've got plenty of money. If you let me move in again—"

"No, we tried that already."

Her eyes glisten for a second, looking wet. "Yeah," she says. "I guess so."

He reaches across the table and rests his hand on hers. It is warm, but there are little cold spots where the flesh is lanced by metal. "I can't take your money," he says. "It doesn't feel right."

"Why not?" she asks. "I'm happy to give it to you. It isn't like I know what to do with it anyway."

"But maybe someday you will," he says.

"Godamnit," she says. "I should just buy you a house and be done with it."

Chris is surprised. "You have that much put away?" he asks.

She grins. "Would you like to find out?"

## MOVING?

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"Christ, you're terrible," he says. Somehow, his Jameson arrived without his noticing. Good service, he thinks, and takes a sip.

"I know you feel weird about taking my money, but if it's ever a real problem, you need to stow your pride and ask me for help."

"Thanks," he says. "But it's never going to come to that."

The waitress delivers Lanna's soup. She offers Chris the first spoonful. It's thick and creamy. The bits of ground meat throughout must be ostrich. Chris nods in approval, and Lanna takes back her spoon, digging in with enthusiasm.

Then Chris notices something unsettling. Sitting in a window booth is a bald man in a suit. He's making an unconvincing show of reading the paper. His eyes dart constantly around the room. They lock with Chris's for a moment.

Chris decides that there is no way the guy could be a spook—he's just too inept.

"Lanna," says Chris.

"Mmm?" she asks with a mouth full of soup.

"Your friend is here. The bald one in the suit."

She swallows. "No shit?"

"He's over there by the window."

"You think I should look?"

"I wouldn't," says Chris.

"What should we do?" she asks.

"Eat," says Chris. "There's nothing he can do to us in a crowded place."

Right on cue, the tuna and bison arrive. Lanna seems worried, but there isn't much that can affect her appetite. Chris digs in, too. The waitress was right. The tuna is very good. It's raw in the middle, and lightly flavored with wasabi. It tastes light and clean in a way that only raw sushi-grade fish can.

They eat in silence for just a minute or two, until Lanna asks, "What should we do now?"

Chris looks up from his meal. There are two plates in front of Lanna, and they both look like they just came out of an industrial dishwasher. "Jesus," he says. "You're done already?"

"I was hungry," she sounds almost apologetic.

"Wait for me to finish," he says. "Then we'll figure it out."

He takes his time, because it isn't everyday he has a big filet of sushi-grade tuna for lunch. When he's done, he wipes his mouth, and downs the last of his Jameson. He stands up from the table. "Come on," he says.

"What? Where are we going?" asks Lanna, concerned.

"We're going to go ask this asshole what he wants," says Chris. "Why sneak around? He can't do anything to us here. It's the perfect time to confront him."

"No! This is stupid. If they find out that I know, they'll just pull this guy, and send out someone else. It's better to be followed by someone I can recognize than by someone I can't."

She has a point there, thinks Chris. He sits back down. "Well, how do you think you're going to solve this problem in the long term, then? You need to figure out who these people are and why they're following you."

"I told you," says Lanna. "They're fucking spooks, CIA, Camp Peary nuts—"

"They're not CIA," he says. "There's no way a spook would wait on my doorstep for you, and then follow us into a restaurant where he could be recognized—sloppy."

"Then who the fuck is it?" she asks.

"How the hell should I know?" He lets out a long sigh. "So what do you want to do?"

"Go back to your place," she says.

"All right," he says.

The next time the waitress comes by, Lanna pays the check and they leave. The bald guy pretends not to notice them walking out the door.

On the way back to Chris's place, they stop at the grocery store. Lanna insists on buying him some provisions, and he's too smart to refuse her. Maybe he won't take her money, but he's desperate enough to let her buy him groceries. He picks up a couple of extra jars of peanut butter on top of everything else and they take the bus back to his place.

When they get there, they unpack his groceries and chat about who might be following her. Lanna still thinks it could be spooks, but she's starting to consider the feds too. Then again, maybe it's the mob, because even though she thought she got away clean after skimming from their laundering operation a couple of years back, there's a small chance they could have traced her via some exploit or other she learned about this year. They continue to speculate, and at the same time, they fill Chris' cupboards with more stuff than they've held since he moved in. When they get to the peanut butter, Chris takes two jars and heads for the door.

"Come on," he says.

"Where are we going?" asks Lanna.

"You'll see. Just don't freak out, okay?"

"I'm not making any promises," she says, and follows him out the door.

They head down the hallway to the stairwell, and, when they get there, Chris starts climbing, taking the steps two at a time. Lanna keeps up with him no problem, even though her legs are a lot shorter. The high metabolism has its benefits.

"Come on," she says. "Tell me where we're going."

"The roof," Chris says. "We're going to make an apology on behalf of the human race."

"What?"

But Chris isn't giving any more away. They climb to the top, the tenth floor. By the time they get there, Chris is sweating, and Lanna looks like she's just warming up.

"Here we are," says Chris, breathy from the climb. He opens the door to the roof.

It is packed with potted plants. There are rows of tomatoes, peppers, cucumbers. A few young trees, too. Chris isn't sure, but he thinks they're apple trees. Ivy has attached itself to the outside edges of the concrete roof. In the corner, there is what looks like a small pile of rubble. Chris heads over. On his way, he can see that someone has made a big pile of dirt in

one corner of the roof. It looks like a few things are beginning to sprout in it.

Lanna is close behind him. "What is this?" she asks. "I didn't know someone was gardening up here."

"Neither did I," says Chris.

As they near the rubble, they hear a chittering noise. The leaves rustle, and soon, four squirrel-things have scurried in front of the rubble pile. They stand on their hind legs in front of it, ready to protect whatever might be inside. One of the squirrels has a long, curved piece of glass in its hand. The end it is holding has been wrapped in a thin strip of leather. It must seem like Excalibur to the little guy.

"Holy shit," says Lanna. "They have thumbs."

Chris gives her a look, and she shuts up. Then he gets down on his knees and sets the jars of peanut butter on the ground.

"I know one of you got hurt today," he says. "I'm sorry for that. I just wanted you to know that we're not all like that. I stopped them as soon as I knew what they were doing."

The squirrel-things chatter anxiously. The one with the glass waves it around in what seems meant as a menacing gesture.

"I understand that you're upset," he says. "You should be. People can be real assholes. Just so you'll understand that we're not all assholes, I've brought you a couple of gifts." Chris slowly moves his hands to one of the peanut butter jars, and unscrews the lid. He sticks his finger in the peanut butter, pulls it out, and licks it off. "See?" he asks. "It's good. I know you like it, because one of you took some from my apartment. These jars of peanut butter are my gift to you." He gently pushes the jars of peanut butter toward the squirrels. Then Chris gets up, and carefully backs away.

"Come on," he whispers to Lanna. "We're leaving now."

"Okay," she says, still staring at the squirrel-things. He has to lead her by the arm back to the door and down the stairs.

"My god," she says. "I thought you were losing your mind."

"I know," he says. "I thought you were losing yours, too. About the spooks."

"Yeah, I know," she says.

They go back down the stairs, taking their time, both lost in thought. Chris thinks to himself that it was a good idea for him to make a peace offering. He hates to think what one of those stealthy little buggers could accomplish with a piece of glass in the middle of the night. Lanna is still trying to accept that the squirrel-things exist.

Eventually, they get back to Chris's apartment.

"Coffee?" he asks as he unlocks the door.

"Hell yes," she says.

The rest of the afternoon is relatively peaceful. They drink coffee. He stretches another canvas, hoping to recreate his thumbled squirrel piece before Rico's show. They discuss what might happen if the squirrels declared war on the city. It would be ugly, they agreed. Much would depend on how many of the creatures there were. If there were enough of them, they could probably slit the throats of half the population in a single night. "Yeah," Lanna says during the conversation. "The peanut butter was a good idea."

They chat until dusk, when there is a knock at the door. Chris goes and

takes a look through the peephole. It's the bald guy, and he looks annoyed.

"It's that guy," he whispers to Lanna. "The spook."

"Shit," she says. "Quick, where can I hide?"

"I don't have a lot of cupboard space anymore," he says. "I think we'd better just find out what he wants."

Chris grabs the air rifle from where it leans against the wall and pumps it a few times. It's pathetic, but it's all he's got.

"What do you want?" he yells through the door.

"I just want to talk to Lanna Stevens," he says. "I have a message for her."

"Why have you been following her?" asks Chris.

"She doesn't have an address," says the guy. "I have strict instructions that the message is to be delivered in person, and confidentially. I have to get close enough to talk to her, and she moves around so goddamn fast that it's almost impossible. I've been trying to deliver this message for about a week."

Chris looks at Lanna. "So what do you think?" he whispers.

"Who do you work for?" yells Lanna through the door.

"I have to deliver my message confidentially," says the bald guy. "Or it's my ass."

"Well, Chris isn't going to leave me alone, so you're going to have to say what you have to say in front of him."

"Can I at least come in so I don't have to yell my *confidential* message through the door?" The poor guy was getting exasperated.

Lanna looks at Chris. He shrugs. "Makes sense," he says. "People still communicate by courier when they want something secure."

"Yeah," she says. "Let him in."

Chris opens the door, but keeps the air rifle trained on him as he walks in. The guy is taken aback at first. Then he gets a better look at the weapon.

"Is that an air rifle?" he asks.

"No," lies Chris.

"Buddy, it has 'air rifle' written on the side."

"Well, maybe it is," says Chris, "But it's still gonna hurt if I get you in the eye."

The bald guy shrugs, and walks over to Lanna. He reaches into his inside jacket pocket, and there's a loud pop. The bald guy yells.

"What the fuck!" he screams. He's holding the side of his face. "Will you put that thing away? I've got something to give her, all right? I swear to god that I'm not going to hurt either of you." He rubs his cheek. "Jesus, that stings. I'm glad you didn't get me in the eye."

"Just say what you have to say, and get out," says Chris.

"Ms. Stevens, I'm here to offer you a job on behalf of my employer, Mr. Sakata of Biosoft Industries. As a gesture of his good will, he has authorized me to give you two hundred thousand dollars." He shoots a nasty look at Chris. "That is, as long as your friend will let me give it to you."

Lanna is intrigued. She nods at Chris, who lowers the air rifle. The bald guy reaches into his inside jacket pocket again, winces a little, then slowly pulls his hand out again. As it emerges, it is holding a slip of white paper with a card paper-clipped to it. He holds it out to Lanna, who accepts it gingerly. It's a cashier's check for two hundred thousand dollars.



"If you are interested in his offer, please contact him via the information on the card that is included with his gift."

Lanna slides the card out to get a look at it. "Thanks a lot," she says.

"Just doing my job," he says, unhappily.

There is a knock at the door. Chris looks over to the door, then back over at the bald guy, still unwilling to take the bead off.

"Chris," says Lanna. "It's okay. Why don't you go see who's at the door?"

Chris hesitates a moment. Then he lowers the gun, and walks to the door. He looks through the peephole. "What do you want?" he yells.

"My kid says you took his rifle," yells someone from the other side.

Chris opens the door. A large black man is standing there. His hair is very short, like he usually shaves his head, but hasn't had time to keep it up. He has big cheeks with pockmarks. "That my boy's rifle?" he asks, pointing to the gun that Chris still holds.

"Yep," says Chris. "That my painting?" asks Chris, pointing at the cardboard tube under the man's arm.

"Yep," says the man. He holds out the tube, Chris takes it, and gives him the rifle.

"You just tell him not to shoot those squirrels. They're dangerous." The kid's dad looks at Chris strangely, then turns and walks away.

The bald guy decides to use the door while it's open. "Nice meeting you," he says and quickly exits.

Lanna and Chris are left looking at each other.

"I might get you that house out of principle," says Lanna. "I just can't get rid of this shit fast enough." She takes another look at her check and shakes her head.

"We went over that already," says Chris. He goes to the counter and pours himself another cup of coffee. "I never knew that you didn't get yourself a place after you moved out."

"Yeah," she says. "I had one for a while, but it just seemed like a waste. I don't have much stuff, and I'm over here most of the time anyway."

"That's true," he says. "But where do you sleep? You're not over here every night."

"I don't sleep every night," she says. "Maybe about one in four."

Chris looks concerned. "You need to get off those stims," he says. "They're messing you up."

"I know," she says. "I didn't take any today."

"Then let's get some sleep," he says.

Before Chris even opens his eyes the next morning, he notices the smell. It is unmistakable, and his first thought is, why? Why, after his generous gift of two jars, did they enter his apartment to steal more? But then, as his eyes adjust to the morning light and focus on the propped up canvas in the middle of the room, he understands.

"Lanna," he says, jostling her a little. "Lanna, you've gotta wake up. I need to shellac this thing right now."

"What?" she asks. "What are you talking about?"

"Take a look at this," he says, pointing to the canvas in the middle of the room.

"My god," she says. "It's gorgeous." She goes over to examine the canvas. "The texture and detail are amazing." She sniffs at the air suddenly. "But I guess I don't get your choice of medium."

"It wasn't me," he says.

Lanna's eyes get big. "No shit?"

"No shit," says Chris. "Come on, we have to get this shellacked so it'll keep."

The next day, at Rico's art opening, the intelligentsia are milling around. They are mildly interested in the various condiment creations. It is a novel medium, but surely, they agree, not one to come into widespread use. However, their tune changes when they get to the centerpiece of the exhibit, a comparison piece of sorts. One woman, a local art critic, says, "it really showcases the power of condiments to convey texture and shape, and contrasts them with the power of traditional paint to portray color."

The exhibit consists of two pieces side by side. Their subject is the same—a strange squirrel with bony thumbs on its paws. One is done in the style of pixelism, the other, in peanut butter. A wealthy philanthropist at the event observes that "while the pixelism piece does an excellent job at showing the light of intelligence in the creature's eyes, the peanut butter piece is incredible at portraying the grain of its fur, and depth of facial features."

A famous collector, before purchasing the set, explained his motivations by saying that "while the squirrel in peanut butter seems to be holding a sword of some kind, the squirrel in paint has been defaced with an overly large mustache and beard. There is little doubt in my mind that these differences have as much or more import than the similarities. These contrasts have, more than any other characteristics, convinced me to buy the set, if for no other reason than that they might be set side by side as long as I live, their intersections and dissimilarities more ripe for the viewer's consumption."

The set sells for more money than all the other condiment pieces combined. Rico looks for Chris to tell him the good news, but he has already left with Lanna. They wanted to hit the art supply store before it closed. Chris intends to leave some oil paints on the roof overnight. ○

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# CLOSE

William Preston

**Just because you're feeling ill at ease and terrified doesn't mean something isn't out to get you . . .**

**T**hat night, a turtlish car crept into the parking lot of the former St. Jude's School fifteen minutes after every other, passed more than a dozen vehicles huddled in regions of brightness, then backed into the dimmest corner, against the narrow band of woods. Crows riotously packing the high branches briefly lifted off and raised even more argument, then settled back to their ordinary din.

Elbow on the open window, Ed Lukens breathed clouds as he surveyed the other cars. Some had gathered under the tall, helmeted lamp in the lot's middle; the rest, in the first row of slots by the one-story brick building, faced the few bright, curtained windows and the regularly spaced floods.

He'd kept the ignition key partly turned; the dashboard clock read 7:20. Choosing what to wear had taken too long, what with his mother out for the evening with his married sister. The part in his flat brown hair hadn't fallen correctly, so he'd simply combed his hair forward, where it troubled his brow. Then there'd been that wrong turn, his brain's autopilot taking him initially toward work rather than here. He twisted his face into an imitation of disappointment, though once the expression was in place, he felt himself sinking into despair.

During mass two weeks ago, in the middle of the sermon, his sister had dropped the church bulletin into his lap and, with one red-nailed finger, tapped twice, sharply, at a notice.

Does meeting new people make you uncomfortable? Does small talk make you anxious? Afraid to get out of the house for new experiences?

Through the rest of the service, he'd imagined everyone in the congregation reading those sentences and thinking only of him, thirty-four, tall, and strange. At night he'd lie in bed, the window open in any season, listening. Not attending to the night's sounds exactly, but to the gaps between the sounds, he ached, the aggregate emptiness confirming his sense that everyone was truly alone.

Two weeks his sister had kept after him, mentioning the bulletin notice over dinner every other day when she and her husband visited. Coming tonight was meant to stop her wearying assaults. The evening had been

difficult enough to this point; walking in late seemed impossible. He pictured people turning toward him, holding drinks, going silent. He couldn't face such attention. Just to be here was quite an achievement. Maybe another night, he'd manage to go inside.

He considered sitting a while longer, then driving a meandering route home. Probably his mother wouldn't be back until later, and he could lie that he'd attended, answering with shrugs when pressed for details.

Then he heard a failing muffler, and headlights swept his eyes. A four-door car, streaked with old mud, appeared, and in the light from the center pole Ed could see, as the car paused, the female driver, pale and blonde, leaning over her hands, which clutched the steering wheel. She scanned the lot, moved forward hesitantly, then at last selected a spot one row from the building. The engine cut out, the sound of crows returned, but she didn't step out.

Ed waited, an unfamiliar certainty expanding in him like a dense bubble. She didn't leave her car when the dashboard clock read 7:21, then 7:22. All the while, the chorus of crows rose and fell, or shifted about, restless. Ed's breathing quickened. She couldn't take that first step from the car. She nearly hadn't come at all. What held *her* back? His own fears seemed to him so inexpressible, yet here was someone who surely shared them, a normal-looking woman of around his own age, from what he could see—and gathered inside the old school, even more people who would know what it meant to be paralyzed, stuck at what Ed's sister called "an inability to move to the next level."

The longer she waited, the more watching her from the darkness troubled him, but driving off would, he reasoned, draw attention to how he'd sat there all this time. He didn't want to be the kind of person who would watch someone this way. After setting a determined look on his face, he took out the key, opened his door, and unfolded his lanky frame into the cold night. His hand resting where his window should have been, he realized he hadn't raised the window. As he bent back into the car to insert the key, he heard the other car's door open. He willed the electronic window to hurry.

He emerged from his task to see the woman, wearing a white, fur-fringed coat, still standing by her car. He shut the door, knowing it would startle her, but she didn't budge. Something in his expression had shifted, he knew, but he couldn't quite reorganize his face and walk at the same time, so his pace across the lot became irregular. When she looked back at him and said "Hi," a bit loudly, he initially and instinctively turned away. Raised to be polite, he managed a "Hello" back in her general direction. She was already on the move for the doors; he followed. He entered the brightness under the tall lamp, then faced the first set of double doors into the high, open lobby; she held the door, her other hand hooked by a thumb between her purse strap and shoulder. She leaned inside, and he stepped quickly so she wasn't delayed by his approach.

"Thank you," he said faintly.

"You're very welcome," she said, passing him the door's weight. She passed him the next door as well, and they both muttered another exchange.

He considered her short-heeled shoes on the thin gray rug at the entrance. From the lobby, the single, half-lit hall ran directly to their left. Two

distinct voices laughed, and then her shoes proceeded, snapping onto the tile. Her right foot slid noticeably out of the heel with each step. When, two rooms down, she turned left, Ed turned as well and entered a room that seemed too bright.

Entrances daunted him. Usually the tallest person in any gathering, at six foot three, even his slouch could not make him less conspicuous. Wincing slightly, he was met by the hellos of several people rising from their seats. One, a black man, surprised him by being taller. He shook hands all around. The only person whose eyes he briefly met was a priest, identifiable by the Roman shirt collar. He heard the woman from the lot apologize for being late, and he somehow picked up that she, too, was new to the group.

Ed didn't catch any names, as simply pushing a smile outward and grasping hands had required so much attention. "You can hang your coat over there," the priest told him, indicating a wheeled rack. Ed did as he was told, and with his back to the others he became aware of his actions as if they were a choreographed performance he'd failed to practice. Before him hung floor to ceiling curtains; in a gap, he saw himself reflected. The metal hanger slid strangely from the pole, then plunged too shallowly into the first sleeve. The woman from the parking lot stepped in beside him to hang up her own coat.

She leaned slightly toward him. "I'm Kendra."

Stalled with the coat and hanger, he faced her. "Ed. Lukens." She gave him a quick smile and turned away.

Leaving the coat hanging jauntily, he looked for the nearest seat and took it, on a beige sofa whose front edge was threadbare, foam showing from beneath. He shook hands—for the second time, though he didn't realize that—with his neighbor. Dark hair streaked the back of the man's hands; his jacket bore a local union number over the left breast. Over a peach-colored shirt, Ed wore an earthily brown sweater his mother had given him two Christmases past. He'd considered, but rejected, a sports coat. A second glance showed his sofa-mate to be nearly bald, the hair far back on his head shaved close.

The priest raised a hand to attract Ed's attention. "I didn't catch your name." Ed hadn't said, in fact, and looked from the priest's pink, pocked face to the table behind his plastic chair, a potential harbor of coffee dispensers and some assortment of snacks. The table stood just under a wall-length blackboard. Instantly Ed wanted something in his hands and something to do with his mouth besides talk.

"I'm Ed Lukens."

The priest's eyes rolled upward to consult a memory. "We didn't speak before, did we?"

"Um . . ."

"On the phone. You didn't call me. . . ?"

"No. No. I should have called." There had been a number in the bulletin.

"Oh, that's fine. It's just so I know how much food to bring."

"I eat too much of it," said the man at Ed's side, leaning forward on the sofa. Everyone laughed pleasantly. A piece of cake lay on a paper plate between his neighbor's boot-clad feet.

"You spoke to me, Father," said the other new arrival.

"Kendra," he said, pointing with satisfaction, though Ed supposed she'd told him her name only moments ago. "I remember our talk. I'm really glad you could come. We've just been chatting so far tonight, so you haven't missed anything. Let's just run through the names, and then I'll give the two of you my standard speech for newcomers," he said, making Ed twitch. Ed studied the cake on the floor but heard how the priest's voice kept shifting direction as he angled his talk back and forth between Kendra, seated to the priest's left, and himself.

The tall black man, Marshall, sat closest to the door in a chair that diminished his size by forcing him low and so far back that his knees were higher than the armrests. Kendra was next, on a chair of detached cushions. The priest sat beside her in what appeared to be a classroom chair of metal and stone. On the sofa perpendicular to Ed's, Yvonne, upright and thin as a corn-stalk, with sparse brown hair that stuck to her skull and hung below her shoulders, sat beside Terrance, Ed's age but silver-haired. Ed thought Terrance looked pleased somehow; it had to do with the way he sat forward, the leather elbow patches on his sport coat resting on his knees, and his faint smile; Ed thought he wouldn't mind getting to know him. Pat shared the sofa with Ed. Somewhat out of sight behind Pat, so Ed had to shift about to see them, an Asian couple, Yok and Thomas, clutched each other's hands atop the woman's lap, their classroom chairs shoved together.

That they were Asian made Ed remember that there were important cultural differences between, for example, Koreans, Japanese, and Chinese, and his mind momentarily busied itself worrying that he might say the wrong thing. Then he switched to considering something more obvious: They'd come together. Could a couple feel mutually anxious about meeting others? Perhaps they were brother and sister.

"And you can call me 'Father' or 'Father Mike' or just 'Mike,' okay? First, anything we say here stays here."

"Well," said Yvonne, raising her brows.

Father Mike gave her a serious look. "You know what I mean. This is a safe place. What I mean is, we don't have to worry about saying something that might sound foolish, and no one here is looking to make you uncomfortable." Yvonne nodded to one side noncommittally. "Our aim is to get our experiences out in the open, as much as we're comfortable talking about them, and see what we can learn from each other."

The priest opened his hands to indicate everyone seated. "So: Anyone have any visitors in the last two weeks?"

A disjointed chorus of no's followed. Much to his surprise, Ed pictured Kendra coming to see him at his house. He'd arranged for his mother to be out. They'd sit together on the sofa . . . no, that didn't look comfortable. He'd scoot forward and back on the cushion, as he did now, unable to find the right spot. Better if they sat at the small table in the kitchen together. They'd cut fat slices from one of those store-bought poundcakes his mother kept in the freezer. Kendra loved them too. Then he'd hear the key rattle in the front door as his mother returned.

Ed's fingers clutched the cushion under him. Pat had said something he'd missed, concluding with, "I figure this dry spell can't go on forever."

"It could," said Father Mike. "There aren't rigid rules here. All relationships have elements of the unknown, the unexpected, right? Why should this be any different?"

"That earthquake in India last week," said Yvonne, and the others made sympathetic sounds. "It made me think. My life is difficult, but so is everyone else's, just in different ways. People died in that. People are without homes. Okay, this is stranger than what a lot of other people go through, but it's not like I'm the only person, which is what I thought ten years ago."

"What makes anything bearable is other people," said the priest. Ed studied the carpet's fibers in displaced concentration, because really it was other people who made life hard. "You think about all the terrible and amazing things we go through as individuals, all the events and catastrophes and what-have-you down through the ages, and what do people do afterwards? We tell our stories to each other. Somehow we make sense of things when we do that. We realize we have something in common, and we try, though it's not some perfect process, to come to some common understanding of what we've been through."

Ed caught a glimpse of the Asian couple hugging sideways, their close-cropped heads leaning together.

Terrance tightened his lips together in a grin and scooted forward a bit on the sofa, preparing to speak. Beside him, Yvonne blinked a few times and looked at the floor.

"Last time, I was talking about how hard it is in a new place." To Ed, Terry seemed outgoing, trying to catch the eyes of each person in the room. "I have to assume, because I've moved before, I can expect the same kinds of things. And it's funny, well, not funny, but I've developed a kind of paranoia, where I think people already know things about me. Or like they're in on some secret I'm not in on."

"So which is it?" asked Pat as he rose in the direction of the snack table.

"You know, sometimes I feel there's a conspiracy and it's all about keeping me in the dark. And sometimes I think when people look at me they see somebody who's not fitting in, somebody . . . marked in a way."

Yvonne cleared her throat and straightened more. Ed consciously tried to force his own back into a more erect position; he'd sunk too low into the cushion. "Stages," she said. "Those were stages I went through. The conspiracy and then the feeling different."

"They're really interrelated," said the priest, showing his hands laced together.

Ed remembered feeling those ways in grade school. Kids gathered by their lockers engaged in conversations to which he would never be privy. What did people talk about? At times he believed, probably rightly, that kids were talking about him, or about every other untouchable at school. He'd imagine the school empty, himself simply circling the hallways in a day of bright floors and silence.

Involved in his own thoughts, he'd missed some of what Terrance said, tuning back in on "... incident since I moved here." *Pay attention*, Ed told himself. He knew the importance of taking an interest in people, listening to them so you could ask good questions that showed you wanted to know them better.



"Anyone else have anything strange happen Saturday night?" asked Yvonne. Everyone considered this.

"A visit?" asked Terrance.

"No . . . A dream?"

"I might have had a dream. Nothing new. Eyes. Big eyes." His hands opened like opposing C's.

"I get that a lot," said Pat, returning with another piece of cake and a cup.

"It might have been nothing," Yvonne concluded. "I wonder whether we're all—all of us who've experienced this—whether we're linked. Events in each of our lives might be connected. Or maybe not."

Utterly lost by this exchange, Ed watched Kendra's reaction; she seemed merely attentive.

Thomas told the group, "My wife and I were invited to visit some people in the Adirondacks next weekend." He had only the local accent, no trace of something foreign. This fascinated Ed, when people looked a certain way, but you couldn't conclude anything from it. "They have a lodge up there. We decided not to go. It's too risky."

"You'd feel too exposed," said Pat.

Yvonne agreed firmly. "Anything could happen."

In the silence that followed, Pat picked up his cake and took a tremendous bite, his face staying engaged with the piece for some seconds as he managed it. Terrance and Yvonne took the opportunity to get themselves coffee.

"Maybe it would be helpful," said Father Mike, "especially for our new folks, if we each talked a little about our first or even long-term experiences. Then maybe the two of you," he said to Kendra and Ed, "can find some common ground. If you feel comfortable, you could share some of your own, um, accounts."

Glances ran around the group, Ed alone keeping his head down, and though Yvonne and Thomas both opened their mouths to speak, Kendra broke the moment. "The others won't stop coming." Ed's thinking seized as he waited for something more, words that would make sense of everything he'd heard tonight. She finally said, "Not coming like . . . visiting. That's stopped, or I guess it's stopped. But it's like I'm never alone now." Marshall pressed his hands together and brought them to his lips, thumbs tucked below his chin.

"Implants?" Pat quietly asked.

Breathing loudly through her nose, Kendra inhaled and exhaled twice. "It's the loss of privacy, you know? You set up barriers—who you let into your life, how close you let them get, what you tell people about yourself . . . Instead, *they* just . . . intrude."

Ed chose this moment to rise in the direction of the snack table; rather, some impulse drove him upward, though no conscious thought about food and coffee had come to mind. He saw the look Father Mike gave him; he was used to such looks, which was another reason he avoided social gatherings. Rules for when to speak, when to leave, how to serve himself, perplexed. Clearly, this time was wrong for rising. Once at the table, a panicked slowness overtook him; he watched his hands detach one paper cup from its nested fellows, a task that seemed surprisingly complicated.

"The first time was five years ago," said Kendra. "I live alone. My son stayed with his father when we split up, and they live in Colorado now. I'd gone to bed." Ed had a cup, but couldn't listen and choose among the three dispensers at the same time.

"My house is on an old farm property that nobody farms, so there aren't any other houses right there. It's maybe half a mile to the closest one.

"Anyway, at some point, I woke up. I thought at the time that I'd heard my son call me. For a minute I just lay there with my eyes open, and then I realized I couldn't move." To remember, she faced the ceiling. "I had the impression someone was in the room, standing by the bed, but the way I was lying there, I couldn't see him. So it was like that for a while, and I was terrified, terrified, and then there was a voice, kind of a voice in my head, but I wasn't sure I heard it. You know?" The hot water and coffee dispensers—one marked by a Post-It reading "DECAF"—were of a sort with a central disk that you depressed to expel the coffee. Splashing in the cup, the coffee sounded to Ed like a man urinating; he felt that he, at that moment, was that man.

"The voice was reassuring, even though I felt like it was maybe lying, that it didn't have any right to reassure me. I couldn't move, I suddenly wanted to see my son . . ."

Ed started back, but he noticed a bookmark-sized handout by the cake. The angle at which the handout was placed forced him to twist his neck, and the violet paper made the print difficult to make out. AVE? SAVE? Bold letters in four lines at the top spelled out Survivors of Abductions and Visitations by Extraterrestrials. Numbered items, ten in all, seemed to provide tips for handling such experiences. An odd humming began in his head, like the time he'd blacked out while donating blood. Standing awkwardly, tugged by Kendra's voice and the need to get back to his seat, Ed couldn't force the words on the handout into coherent sentences. Back hunched to make himself smaller, he returned to the sofa.

"I think I fell asleep again. I even dreamed. Dreamed of animals, rabbits, running in a field in the daylight. Then somehow, I was outside. I don't know if I was floating, or if I was being held up by someone, maybe just one person, but I could see the stars and the tops of some trees. I couldn't turn my head. I knew I was in my yard. I hadn't gone very far."

Facing the carpet, Ed heard the air whistling in his nose, and he tried to stop it by slowing his breaths. He bowed his head to sip coffee.

"It's okay," said the priest.

"I'll be all right," said Kendra, but her voice was thick, muted. Ed looked up and saw her swallow with difficulty. "The voice told me I wasn't going to be hurt and I didn't need to feel afraid. I had this sense, or maybe I thought this later, that whatever was behind the voice was looking for . . . a connection, just . . . time with me."

Ed noticed an approaching voice and soft steps in the corridor. Two men passed, one talking and the other listening; both looked into the room on their way, and then they slipped by. Ed recalled now the dozen or more cars in the parking lot. He saw a sentence in his mind's eye, and he read the sentence: *I am in the wrong room.*

"I don't remember after that. Either the stars kind of went out, or I

blackened out, or something black went over me. I do remember eyes, eyes like Terrance mentioned."

"You won't forget those," said Pat.

"I remember turning around a lot with my arms out, like in a weird, formal dance. I don't know. When I realized where I was again, I was sitting downstairs. It's funny." She smiled at each person in turn. Ed managed to return the look. "It's funny," she said again. "I thought I'd come downstairs for something. So I got myself some orange juice from the fridge and walked back upstairs. I thought, 'That's not it. That's not why I came downstairs.' And I went to bed.

"The next morning, I got up, I did the usual things. I was in the bathroom, and I remember looking at myself in the mirror and suddenly remembering what had happened, that someone had been there and that I'd been outside, but not anything after that. Still. The other times . . . I remember even less of those."

A moment passed, and then Father Mike said, softly, "Okay."

"I find the visits reassuring," said Yvonne. "They remind me that they're real. If they didn't keep happening, I wouldn't believe them."

"But you never know when they'll come," said Thomas. "Sometimes it's several in a short period. And my wife and I are wrecks for weeks afterward."

After a glance at the slice of dark window between the curtains, Ed kept his eyes elsewhere; he felt his mind working, against his will, to conjure the faces of insect-headed aliens half-veiled in the outer darkness. Even looking at his hand picking a piece of lint from his knee, he imagined a face forming and receding, forming and receding. He couldn't imagine why such a being would watch him. Certainly he wasn't worth pursuing. In the hall, the two men from the other group passed, returning. He wished they could hear what he was hearing.

"It's not like that for me," said Pat. "I mean, it's true, I get sort of jangly, my nerves are jangly for days. I get what you're saying, but I also like that they have a focus on me. I don't feel it's malign. I'm being watched, but, I have to say, it's not like being watched by a stalker or something."

"People feel very different ways about this," said Father Mike. "I think you need to integrate the experiences with your workaday lives. Talking can help you do that. This is something that you can't undo, and you should find a way to accept it. It's a mystery the universe is giving to all of you." Ed wondered why a priest would say "the universe" instead of "God." Except at church, Ed didn't often think of God, and when he did, he thought of a night that didn't answer back, the way Jesus' prayer in the dark garden was met by silence.

"My theory," said Terrance, smiling, which felt terribly wrong to Ed, "is that all visitations are linked. People see the Virgin Mary, ghosts, we see these things that come for us. . . . They're all manifestations of some reality we're not fully aware of. They break through into our world. We think that all there is is what we can see; we're so closed off, when you think about it. There are realities just the other side of ours, like through a paper wall." He shrugged. "Things break through, and we see them a certain way. Maybe they aren't anything like what we picture or what we remember. You, uh—"

"Kendra," Ed surprised himself by saying.

"—Kendra, right—you remember some kind of assault, but maybe because you were assaulted once as a teenager. Everything goes through this prism of our perspective, do you see what I'm saying?"

Even Ed could read Kendra's face, and he felt how the people in this room weren't helping her. He sensed, pressing from outside the building, even gathering at their backs, the presence of mysterious forces.

"Others scare me," he said abruptly. The line often ran through his head like a lyric he couldn't shake; now he said it.

"The others?" asked Father Mike, mostly turned toward Kendra. Yvonne had leaned forward to place her head close to Terrance's; she made her eyes wide until he looked back, and then she mouthed something.

"Others," Ed repeated, and the priest nodded with his whole upper body. "I hear how afraid Kendra is. I get afraid too. I don't think it's wrong to feel that way. I mean, you're being watched. We're all being watched, all of us. Maybe right now. And I think that's frightening. I don't think that I have to . . . integrate that."

"See—" began the priest, but Ed couldn't stop yet.

"I would like some things to be more normal in my life. But just talking about my life doesn't change it. Something has to happen. Maybe I have to do something. And that's been a problem. I'm thirty-four, and I'm not any closer to being comfortable in the world than I was at fourteen. There are too many frightening things. The world should be a lot easier to figure out. Things shouldn't be this difficult, should they?" He listened to the whistling in his nose again and realized he'd run out of sentences. He also realized that he wanted the priest to answer his question.

"Ed," said Father Mike, a stillness entering his features, "you're a very good person to feel that way."

Ed shook his head slightly, but said nothing. *Good* wasn't how he felt at all.

Most members of the group adjusted themselves in their seats. Father Mike tugged back his left sleeve to check his watch.

Then Yok stood, made sure everyone was listening, and spoke. "I think: Where they come from, nothing happens anymore." She made sharp gestures with her hands as a form of punctuation. "Their lives are completely regulated. There's no color or music. There aren't any surprises. They come here and *take* us, and then they have something to tell each other. They have stories. Our lives are interesting because we're complicated, so they take us and tell the stories."

Marshall leaned out over his knees. "That's an interesting theory." He fixed Yok with a look, then shot his gaze at Ed, who jerked.

"It's something I feel very strongly," said Yok.

"Sure," said Marshall, settling back. He opened one hand to demonstrate his understanding. "Sure."

"My son's stopping in next weekend," said Pat, but Ed didn't listen much after that. Personal matters involving children and work surfaced. While several people discussed a route to work to avoid some recent construction, Terrance crossed to Kendra and said something Ed couldn't hear. He saw her pat his hand.

When Father Mike stood, Ed thought he might lead them in prayer. "If anyone wants the leftovers, go ahead," said the priest; then he and Pat carried out the coffee and hot water. They paused in the doorway as members of the other group passed in the hallway. "I'll lock up," Ed heard the priest say to someone.

Kendra had already gathered her coat. In the company of Yvonne, she tossed a cup in the trash can, and, chatting, headed out. Eyes unfocused, Ed stood between his seat and the coat rack. He felt the evening tearing away into unrecoverable pieces. The Asian couple picked up a piece of cake, said goodbye, and left. One coat remained on the rack; somehow he couldn't entirely recognize it. When he finally reached for it, Marshall, who'd been tidying the snack area and straightening the chairs, stepped in too close.

"You're a walk-in, too, aren't you," he said, squinting slightly.

"It's my first time here. . . ."

"No. No. That isn't what I meant. I meant," and his voice both softened and deepened, "*an old soul*. A walk-in."

"Heh," Ed half-laughed, thinking that might be appropriate. He pulled his coat from the hanger without removing the hanger from the rack; when the second shoulder came free, the hanger bent, then sprang upward, tinged the pole, and fell off. Marshall collected it. "Oh, thanks."

Even before rising again, Marshall was talking. "I recognize you. I know you." Again, he gave Ed the narrowed look. "You're like me."

"I . . . I . . ."

"There are quite a few of us around. I see them in the grocery store, at the mall, and we nod to each other." He gave a knowing nod to one side of Ed, as if someone stood there. "I didn't know until one of them came up to me one day out at the park. I was watching some boys play basketball. A gentleman in a long coat came from all the way across the field, and the whole time I watched him coming, I knew he had something important to tell me. He finally got up to me and said, 'You have a message for the world,' and then he left. His eyes were totally black, like they were all pupil. Just like that, he was gone."

"A few days after that, I realized that I wasn't Marshall Price anymore. I hadn't been for a long time, maybe since I was a child. His soul had gone. Now I'm the soul of Uniac, from a planet in the Arcturus system. My message is peace and enlightenment."

"Peace," Ed repeated.

"I've taken many journeys. I can point out the stars I've visited."

"Guys," said Father Mike. Standing in the doorway, he flipped the lights off and on. "Time to go. Oh, the cake."

"I know I'll see you again," Marshall said.

"Marshall," said the priest. With one hand he held the cake plate; with the other, he pressed plastic wrap over a single fat piece. "Are you freaking out our new friend?"

Marshall bent his head slightly. "Father Mike doesn't like me to talk."

"I never said that. Come on."

Ed left first, relieved when the priest started talking to Marshall; Ed didn't like the thought of talking to him in the parking lot.

Outside, the temperature had dipped sharply; Ed felt it in his hands. He'd left his gloves atop his dresser. Only a few cars remained, his own buried in shadow at the far end. The door of one opened and Kendra stepped out.

Wrapping her arms around herself against the cold, Kendra came straight up to him. Her car rattled with uncertain life, and exhaust eased upward from the rear. Father Mike and Marshall passed him where he stood and said their goodbyes.

"I'm glad I caught you. I wanted to thank you." Ed watched amazed as her hand patted his coat's forearm, conveying the slightest pressure. "What you said meant a lot to me."

"I didn't say anything."

"You did. You tried to reach out. I think that was great."

"Oh . . ." He shook his head.

"So. I hope things get better for you." Her car coughed. Her hand went out again, only brushing his arm. "Anyway." She walked backwards two steps. "See you next time?" He worked to produce some answer, but she had turned away.

He watched Kendra leave: shutting the door, putting on her seatbelt, waving at him by twiddling her fingers—he returned the gesture—and then driving off. Marshall and Father Mike pulled away as well, leaving him alone with the commentary of crows.

At his car, he paused and surveyed the lot. *Next time*. Buried in his coat pocket, his fingers touched the keys, two for the house, one for the car. He slid one finger into the ring that bound them. He thought of seeing Kendra again.

A problem presented itself. How could he come to the next meeting? He hadn't belonged. Arguably, he had lied. He wanted to see Kendra at least one more time, he knew they could be friends, but he would have to tell her the truth.

He drew in a ragged breath and his lower lip twitched as if a current were passing through it. He didn't know the correct words, and then he did; he would say *I've never been abducted. I was in the wrong room. That's what life is like for me.*

He faced into the trees to think. Perhaps he could speak to Kendra in the parking lot before the meeting. Nothing in his life to this point had prepared him to think through what her reaction might be. He imagined speaking, but couldn't see or hear what might come from her. She seemed so nice; she might find it all amusing. Or she might feel, in some way, betrayed. Linked solely by a misunderstanding, he might never see her again. He breathed the icy air and couldn't move, his situation, as far as he could judge, unresolvable.

His breath whistled rapidly through his nose, the only sound. The trees were still stuffed with crows; he could see their upright, nervous shapes, but they had gone silent. His chest tightened. The school floodlights and the high lamp in the parking lot blacked out, plunging him into a lake of darkness.

Then we opened the night, gathered him close, and hauled him upward into the deeps. ○

The author's latest Retrieval Artist novel, *Paloma*, was published late last year by Roc and she had stories in *Analog* and the *North American Review* around the same time. In her latest tale for *Asimov's*, a man's life-long obsession becomes both his life story and the story of . . .

# RECOVERING APOLLO 8

Kristine Kathryn Rusch

Part One: 2007

**R**ichard remembered it wrong. He remembered it as if it were a painting, and he were observing it, instead of a living breathing memory that he had a part of.

The image was so vivid, in fact, that he had had it painted with the first of what would become obscene profits from his business, and placed the painting in his office—each version of his office, the latter ones growing so big that he had to find a special way to display the painting, a way to help it remain the center of his vision.

The false memory—and the painting—went like this:

He stands in his backyard. To his left, there is the swing set; to his right, clotheslines running forward like railroad tracks.

He is eight, small for his age, very blond, his features unformed. His face is turned toward the night sky, the Moon larger than it ever is. It illuminates his face like a halo from a medieval religious painting; its whiteness so vivid that it seems more alive than he does.

He, however, is not looking at the Moon. He is looking beyond it where a small cone-shaped ship heads toward the darkness. The ship is almost invisible, except for one edge that catches the Moon's reflected light. A shimmer comes off the ship, just enough to make it seem as if the ship is expending its last bit of energy in a desperate attempt to save itself, an attempt even he—at eight—knows will fail.

Someone once asked him why he had a painting about loss as the focus of his office.



He was stunned.

He did not think of the painting, or the memory for that matter, as something that represented loss.

Instead, it represented hope. That last, desperate attempt would not have happened without the hope that it might work.

That's what he used to say.

What he thought was that the hope resided in the boy, in his memory, and in his desire to change one of the most significant moments of his past.

The real memory was prosaic:

The kitchen was painted bright yellow and small, although it didn't seem small then. Behind his chair were the counters, cupboards and a deep sink with a small window above it, a window that overlooked the sidewalk to the garage. To his left, two more windows overlooked the large yard and the rest of the block. The stove was directly across from him. He always pictured his mother standing at it, even though she had a chair at the table as well. His father's chair was to his left, beneath the windows.

The radio sat on top of the refrigerator, which wasn't too far from the stove. But the center of the room, to his right and almost behind him, was the television, which remained on constantly.

His father could read at the table, but Richard could not. His mother tried to converse with him, but by his late childhood, the gaps in their IQs had started to show.

She was a smart woman, but he was off the charts. His father, who could at least comprehend some of what his son was saying, remained silent in the face of his son's genius. Silent and proud. They shared a name: Richard J. Johansenn, the J. standing for Jacob, after the same man, the family patriarch, his father's father—the man who had come to this country with his parents at the age of eight, hoping for—and discovering—a better world.

That night, December 24, 1968, the house was decorated for Christmas. Pine boughs on the dining room table, Christmas cards in a sleigh on top of the living room's television set. Candles at the kitchen table, which his father complained about every time he opened his newspaper. The scent of pine, of candle wax, of cookies.

His mother baked her way to the holiday and beyond; it was a wonder, with all those sweets surrounding him, that he never became fat. That night, however, they would have a regular dinner, since Christmas Eve was not their holiday; their celebration happened Christmas Day.

Yet he was excited. He loved the season—the food, the music, the lights against the dark night sky. Even the snow, something he usually abhorred, seemed beautiful. He would stand on its icy crust and look up, searching for constellations or just staring at the Moon herself, wondering how something like that could be so distant and so cold.

That night, his mother called him in for dinner. He had been staring at the Moon through the telescope that his father had given him for his eighth birthday in July. He'd hoped to see Apollo 8 on its way to the lunar orbit.

On its way to history.

Instead, he came inside and sat down to a roast beef (or meatloaf or corned beef and cabbage) dinner, turning his chair slightly so that he could see the television. Walter Cronkite—the epitome, Richard thought, of the reliable adult male—reported from Mission Control, looking serious and boyish at the same time.

Cronkite loved the adventure of space almost as much as Richard did. And Cronkite got to be as close to it as a man could get and still not be part of it.

What Richard didn't like were the simulated pictures. It was impossible to film Apollo 8 on its voyage, so some poor SOB drew images.

At the time, Richard, like the rest of the country, had focused on the LOS zone—the Loss Of Signal zone on the dark side of the Moon. If the astronauts reached that, they were part of the lunar orbit, sixty-nine miles from the lunar surface. But the great American unwashed wouldn't know the astronauts had succeeded until they came out of the LOS zone.

The LOS zone scared everyone. Even Richard's father, who rarely admitted being scared.

Richard's father, the high school math and science teacher, who sat down with his son on Saturday, December 21—the day Apollo 8 lifted off—and explained, as best he could, orbital mechanics. He showed Richard the equations, and tried to explain the risk the astronauts were taking.

One error in the math, one slight miscalculation—even if it were accidental—a wobble in the spacecraft's burn as it left Earth orbit, a miss of a few seconds—could send the astronauts on a wider orbit around the Moon, or a wider Earth orbit. Or, God forbid, a straight trajectory away from Earth, away from the Moon, and into the great unknown, never to return.

Richard's mother thought her husband was helping his son with homework. When she discovered his true purpose, she dragged him into their bedroom for one of their whisper fights.

*What do you think you're doing?* she asked. *He's eight.*

*He needs to understand,* his father said.

*No, he doesn't,* she said. *He'll be frightened for days.*

*And if they miss?* his father said. *I'll have to explain it then.*

Her voice had a tightness as she said, *They won't miss.*

But they did.

They missed.

Mission Control had a hunch during the LOS, but they didn't confirm the hunch with the astronauts, not right away. They asked for a few things, another controlled burn, hoping that the ship might move back on track, a few more reports than usual just to get the men's voices on tape while they were still calm (apparently), but nothing they did changed the tragic fact that the astronauts would not return to Earth.

They would float forever in the darkness of space.

And for a while, they didn't know. The ship itself had limited control and almost no telemetry. The astronauts had to rely on Mission Control for all of their orbital information—in fact, for most of their critical information.

Later, it came out that the astronauts deduced the problem almost immediately, and tried to come up with solutions on their own.

Of course, there were none.

Which was why Cronkite looked so tense that Christmas Eve, sitting in the area cleared for broadcasters in Mission Control. Cronkite had known that the three astronauts were still alive, would remain alive for days as their little capsule headed into the vast beyond. They stayed in radio contact for longer than anyone felt comfortable with, and because they were heroes, they never complained.

They spoke of the plainness of the Moon, and the beauty of the Earth viewed from beyond. Apparently, on a closed circuit, they spoke to their wives and children one final time. They belonged to the Earth, as long as the radio signal held. As long as their oxygen held. As long as their hope held.

That was what Richard remembered: he remembered the hope.

No one played the tape any longer of Lovell, Borman, and Anders, talking about the future. The future had come and gone. What reporters and documentarians and historians played nowadays were the goodbyes, or, if they were more charitable, the descriptions of Earth—how beautiful it looked; how small; how united.

*It's hard to believe, Lovell said in what would become his most famous quote, that such a beautiful place can house so many angry people. From a distance, it looks like the entire planet is at peace.*

Of course it wasn't.

But that didn't concern Richard then.

What worried him—what frightened him—was that this failure of the space program would end the program.

It worried the astronauts as well. They made a joint appeal with what would be damn close to their last breath.

*This is not a failure. We're proud to be the first humans to venture beyond the Moon. Please continue the space program. Get us to the Moon. Get a base on the Moon. Send another group to explore the solar system—one who can report back to you. Do it in our name, and with our blessing.*

*Merry Christmas to all.*

*And to all, a good night.*

That broadcast brought Richard's mother to tears. Richard's father put a strong hand on Richard's shoulder. And Walter Cronkite, that stalwart adult, removed his glasses, rubbed his eyes for a moment, and gathered himself, much as he had done five years earlier when a president died unexpectedly.

Cronkite did not say much more. He did not play the radio reports from the bitter end. He let Lovell, Borman and Anders' desired last statement be their last statement.

He did not speculate on the means of their deaths, nor did he focus on the failure.

He focused on the future.

He focused on the hope.

And so did Richard—

At least, he tried.

But while he worked toward the conquest of space, while he studied his physics and astronomy, remained in great physical condition so that he could become an astronaut at a moment's notice, he would look through his telescope into the darkness beyond the Moon—and wonder:

What had they seen in those last hours?

What had they felt?

And where were they now?

Nearly forty years later, they were coming home.

Or as close to home as they could get with a dead ship and a dead crew, and no one heading out to greet them.

Apollo 8 had ended up in an elliptical orbit around the sun, much as the experts predicted might happen. The orbit took just over sixteen months to complete, but kept the small craft far above the plane of the Earth's orbit most of the time. The first time Apollo 8 had come home, or at least close to home, it had been just over eighteen years.

That first time they were discovered almost by accident. Sunlight, glinting off the capsule, drew the attention of amateur astronomers all over the world. Something small, something insignificant, reflecting light in an unusual way.

People speculated about what it was, what it might be. Giant telescopes from the Lowell Observatory to the new orbiting telescope began tracking it, and pictures came in, pictures showing a familiar conical shape.

It couldn't be, the experts said.

But it was.

Everyone hoped it was.

Richard spent those heady days begging his friends at the University of Wisconsin's observatory to turn their telescope toward it—ruining research, he was sure, and he didn't care. He wasn't even an astronomy student any longer. He had done his post-grad studies in aeronautics and engineering and had just started the company that would make him the country's first billionaire.

But in those days, he was still a student, with little power and even less control.

In the end, he had to go to the outskirts of town, away from the light, and try to see the capsule for himself. He stood in the deep cold, the ankle-deep snow, and stared for hours.

Finally, he convinced himself that he saw a wink of light, that it wasn't space dust or the space station the U.S. was building in Earth orbit, or even some of the satellites that had been launched in the last few years.

No, he convinced himself he saw the ship, and that fueled his obsession even more.

Perhaps that, more than the incorrect memory of the original loss, caused the wink of light on the capsule in his painting.

Perhaps that was the catalyst for it all.

Or maybe it was, as his mother claimed, his overactive imagination, held in place by his first experience of—his first real understanding of—death.

Only this didn't seem like death to Richard. It never had. In his mind, there was always a chance that the three men had lived. Maybe they had

gone on, as their ship had gone on, exploring the solar system, seeing things that no man had ever seen up close. Or maybe they had encountered aliens, and those aliens, benign like the ones in the *Star Trek* shows of Richard's childhood, had saved them.

He knew such things were improbable. He had been inside an Apollo capsule in the museum in Huntsville, Alabama, and he had been shocked at how small those capsules were. Human beings were not meant to live in such small places.

He also knew how fragile the capsules were. The fact that the capsule had survived for so many years was a miracle. He knew that. He also knew that his thoughts of the men's survival were a remnant of his childhood self, the one who didn't want to believe that heroes died.

All his plans, all his hopes, for the next eighteen years after that first sighting, were based on the theory (the certainty) that the astronauts were dead. And that Apollo 8 would survive again and return.

The ships he had built, the missions he had planned during those years, were based on the idea that he was going after a death ship, a bit of history. He was going to recover Apollo 8, the way an archeologist would resurrect a tomb from the sand or a deep-sea explorer would record the remains of famous ships like the *Titanic*.

Richard had spent much of his fortune and most of his life finding ways to greet Apollo 8 on its next near-Earth return.

And now that the ship had been spotted on its odd elliptical orbit—on schedule, just like the scientists said it would be—he was ready.

And he was terrified.

Some nights he'd wake up in a cold sweat, wondering if a man should ever achieve the dreams of his childhood.

Then he'd remember that he hadn't yet achieved the dream. He'd only created the opportunity.

And sometimes he'd wonder why that wasn't enough.

The ship, which he had had primed and ready since the beginning of the year, was named the *Carpathia* after the ship that had rescued most of the survivors of the *Titanic*. He liked the metaphor, even though he knew deep down that there would be no survivors of Apollo 8. The command module itself was the survivor; a manned ship that had gone farther and longer than any other man-made vehicle and had returned.

Mankind had sent craft almost everywhere in the system, from rovers on Mars to probes to Venus, and had greater knowledge of the solar system than ever. NASA planned to send more craft even farther out, hoping to go beyond the bounds of the solar system and see the rest of the galaxy.

Government funding was there—it had always been there—for space travel. The latter part of the twentieth century and the first part of the twenty-first were called the Epoch of Space Travel.

Richard liked to believe humankind would look back on it all, and call it the Beginning of Space Travel. He hated to think that satellites and a large, fully equipped space station in orbit, a small base on the Moon, and some commercial traffic would be all that there was to space travel.

He wanted to see human beings on Mars; humans—not unmanned

craft—exploring the far reaches of the solar system; humans boldly going, as his favorite childhood show used to say, where no one had gone before.

And that was why he started Johansenn Interplanetary, all those years ago. With a broader version of that speech, with a great marketing strategy, and with the best minds in the country helping him create the space vehicles, the prototype bases on Mars and beyond, and finally, just last year, the artificial gravity technology that would take mankind to the stars.

Much of this technology, primitive as it was, had military applications, so Richard got his money. His was the first private firm that specialized in space travel, even though he didn't achieve space travel for another few decades after his funding. Instead, he created subcorporations to handle the other scientific developments. Artificial gravity was just one component. He also corralled computer scientists to help him make computers small, so that the space craft wouldn't need bulky on-board computers. And one of his computer visionaries, a man named Gates, had proposed selling those smaller computers to the business market.

That idea alone had made Richard a billionaire.

Others, from the freeze-dried food to the lighter-than-air space suits, simply added to his fortune.

Everyone thought he was the visionary, when really, all he wanted to do was the very thing he'd been too young to do in 1968.

Rescue Apollo 8.

So that was how he found himself wearing one of his own spacesuits, standing on the docking platform outside the *Carpathia*, looking up at its streamlined design. Up close, he couldn't see the scaled-back wings, which allowed the ship to glide when necessary. Nor could he see most of the portals installed for the passengers, since this thing had been designed as both research vehicle and luxury liner.

He could see the outline of the bomb bays underneath, added so that this ship design, like so many others, could be sold to the U.S. military for applications he wasn't sure he wanted to think about.

That the *Carpathia* had the bomb bays, he attributed to the paranoia of his chief designer, a man named Bremmer, who, when he learned what Richard really wanted to use this ship for, said, "You don't know what you'll encounter. Let's make sure this is a fully functional military vehicle as well."

Which meant that they had to have a military unit on board, astronauts who knew how to use the guns and the bombs and the defensive technology that Richard only understood in theory. There was the military unit and the research team—real archeologists, excited that they got to practice at least part of their craft in space; a handful of space historians and some medical personnel, in case something horrible came into the *Carpathia* through Apollo 8. Then there were the investors, the "tourists" as the real astronauts called them. Richard liked to call them "observers," partly because he was one, no matter how much he liked to pretend he wasn't.

The non-astronauts had trained to the best of their abilities. They were in the best physical shape of their lives; they could all handle zero-g like



pros; and they'd even survived multiple simulated space walks without screwing up.

Richard could do all those things and more. He'd had astronaut training in the 1980s, but had never gone into space because his business had taken off. Besides, he had hated NASA's regulations, many of them designed after the *Apollo 1* and 8 tragedies. He had a hunch the regulations would become even more restrictive after more tragedies, and he left before they could.

Even so, his hunch had been prescient. After *Apollo 20*'s spectacular crash into the Moon's surface, the regulations for astronauts had become so restrictive, it was a wonder anyone signed up for the program. Particularly as the private sector began to make its own advances.

Despite his retreat from the NASA program, Richard kept up his training. He was always a bit too thin. He trained on various exercise equipment for more than two hours daily—six on weekends. He became a marathoner. And, as the technology became available, he began to sleep in an oxygen deprivation tent, so that his lungs learned to be efficient with minimal oxygen.

He wasn't the most in-shape person on this mission—after all, he was nearly fifty—but he was the most in-shape observer. He could outrun two of the astronauts, and he could certainly out-perform all of the researchers.

Still, he felt nervous on the docking platform of the ship he'd helped design. He'd been in and out of these ships hundreds of times over the years. He'd even been in low Earth orbit for several trips, so standing on the platform in a space suit wasn't new.

What was new was this sense of awe, this moment of surrealism: he had envisioned going into space on a rescue mission for almost forty years, and now here he stood.

He was crossing into new territory.

When Richard had mentioned this to Bremmer, Bremmer had laughed. *You've been in new territory all your life, boss*, Bremmer had said.

But it was imagined territory, not just by him, but also by his specialists. This, this was new—to all of them.

And no matter how much he justified it, no matter how similar he claimed it was to recovering wrecks of historic ships or finding the tombs of the pharaohs, he knew it wasn't.

When he entered the *Carpathia*, he was becoming one of the first humans to recover a space vessel. He was someone who both captured and created history at the same time.

Instead of being a billionaire or an inventor or a crazed eccentric—all of those media portrayals that haunted him even now—he'd become what he always dreamed of.

He'd be an adventurer.

For the first time, he felt as if he were stepping into his own life.

The *Carpathia* was roomy. She was designed for longer trips with comfort in mind. While her cabins were small, the fact that she had them at all separated her from other ships. Her public areas were large and com-



fortable: a lounge; two research rooms, which could double as equipment rooms or extra sleeping berths; and a cargo bay, which had its own separate environmental system, designed—ostensibly—to bring back things found on the Moon. Richard had watched over the specs himself. He made sure that the cargo bay was also large enough to carry one 1960s Apollo capsule, with plenty of margin for error.

Even though the ship's captain tried to give him the largest space, Richard insisted on the smallest berth. He also insisted on privacy—even though he had delegated as much as possible, he still had to conduct some business. And he had always been a loner. The idea of being in close quarters with a dozen people he barely knew made him shaky. He needed some privacy, a place where he could close the door and not see anyone else. This mission was of indeterminate length; he had to have a place that would keep him sane.

Before he left, Richard tried not to watch the press coverage, but he absorbed it anyway: Richard Johansenn's vanity project, which would probably get him killed; Richard Johansenn's pipe dream; Richard Johansenn's dream.

Columnists accused him of grave robbing or worse. The scientifically illiterate among them felt that he was taking money from the mouths of children for his little space adventure, not realizing that even if he didn't recover the capsule, he—and the country—would learn what happened to vessels that spent almost forty years in space just from the photographs he got of the ship.

He tried not to have expectations of his own. He tried not to imagine—any more than he already had—what he would find.

Instead, he downloaded old memoirs from the Apollo and Gemini missions as well as contemporaneous newspaper accounts and books written about those missions. He also scanned interviews with those crews, watching them, seeing what they had to say.

He barely paid attention to the ride into orbit; he'd done that so many times that it felt like old hat. Two of the archeologists had clung to their couches, looking terrified. The rest of the newbies had watched with great fascination as the *Carpathia* passed through the atmosphere and settled into an elliptical orbit that in three times around would swing them away from the Earth and on a path to match course and speed with Apollo 8.

Below, Earth was, as she always seemed, placid and calm—a deep blue planet with a bit of green, lots of cloud cover, the most beautiful thing in this solar system—maybe even in the universe.

It was home; oddly, it felt like home even as he rode above its surface. It felt like home the way going back to Wisconsin felt like home, the way snow on a clear moonlit night felt like home, the way pulling into his driveway felt like home.

Sometimes, when he was feeling spiritual and not scientific at all, he wondered if this sensation of home was inbred even when looking at the planet from space. Did the feeling come from knowledge that he had sprung from this place? Or did it come from something more innate, something bred into every creature born on that blue-green surface? Had the astronauts of Apollo 8 felt it as they pulled away from Earth? Or as

they soared away from the Moon? Had they looked back, somehow, and reflected on their own folly? Or had they felt like explorers, finally getting a chance to escape?

Richard mostly stayed in his cabin for the twenty hours it would take them to reach Apollo 8. He was nervous. He was worried. He tried to sleep, couldn't.

He wanted answers, and he wanted them now. Yet at the same time, he was afraid of the answers, afraid of what he would find. Finally, he had dozed, coming awake instantly with a call from Susan Kirmatsu.

Most of the flying was automatic; still, he had hired Susan, one of the best pilots ever, for this mission.

He quickly made his way to the cockpit, standing behind Susan to watch. She wore her black hair in a buzz cut that accented her shapely skull. The console dwarfed her small form, yet she controlled the ship as surely as he controlled himself. She watched the read-outs on the screen, ignoring the double-sheets of clear pane plastic windows that he had built into the nose of the ship.

Instead, he was the one watching the darkness ahead. Earth now had shrunk to the size of a large grapefruit. He had never been out so far before.

The co-pilot, Robbie Hamilton, sat at another console and also watched the instrumentation. Two more pilots in seats behind him followed the flow of information on their handheld screens as well, ready to jump in at a moment's notice.

"We have her," Susan said. "She's coming in on the proper trajectory."

Their plan sounded simple: They'd match Apollo 8's path, grab the ship, and pull her into the cargo bay.

They'd done this type of thing before; such maneuvers were familiar to the astronauts on board now. Two of them had helped build the space station. Another had gathered dying satellites as part of his work for one of Richard's companies. And Susan had flown half a dozen practice missions, bringing in everything from satellite pieces to bits of rock, just to make sure that Hawk-class designs like the *Carpathia* could handle this bit of trickery.

"Can I see her?" Richard asked.

"Over here." Robbie ran his fingers along his smooth console, and then, on the screen in front of him, a new picture appeared. Something small and cone-shaped appeared in the upper left.

Richard squinted. "Can we magnify?"

Robbie slid his fingers across the console again, and this time the ship appeared close. And it was tumbling slightly. That had been another worry of his. If it had been tumbling hard and fast, they would have had to try to slow that down first.

Apollo 8 looked worn. Its exterior had dark streaks and lighter streaks, which Richard did not remember from any of the photographs. The nose cone itself seemed dented, but that might have been a trick of the light.

"How bad is she damaged?" he asked.

"Dunno," Robbie said. "We'll find out soon enough."

Soon enough would be hours from now. It would take that long to match the speed and path of Apollo 8. Richard wasn't sure he could stand waiting in the cockpit.

He went back to the lounge.

The scientists were peering out the windows. The observers had dialed up the exterior view on one of the large screens and watched the changes the way someone would watch television.

Richard couldn't stand that either, so he went back to his cabin. The bed took up most of the floor space. He had strapped his clothing bag into its little compartment, but he hadn't needed to. Unless something happened with the artificial gravity, everything would stay where he placed it.

He was too restless to lie down, so he closed the door again and reentered the hall. For a man who planned everything down to the smallest detail, he was stunned that he hadn't thought through these last few hours, that he hadn't planned some sort of activity to keep his mind awake, active, and off the rendezvous.

He returned to the lounge with a vague idea of reviewing the plans, but instead just sat silently in the corner, thinking about what he was about to do.

Or not do, as the case might be.

As the large screen showed a looming Apollo 8, Richard went back to the cockpit. He listened as Susan gave terse instructions, and watched through the windows he had designed as his ship—*his* ship—lined up with a ship he had only seen in his dreams.

Apollo 8 looked larger than he expected and appeared formidable in a rockets-and-rivets kind of way.

The capsule wasn't streaked, as he had thought at first; it was damaged with tiny holes blasted along its sides. The cone's nose was dented—something had hit it hard—but hadn't burst open. The small round portals had clouded over and appeared to be scratched.

Susan reported damage near the engines that had malfunctioned—flaring too early and too hard, was the speculation, but no one knew exactly what had gone wrong. Once his team had the capsule, they might be able to figure that out and solve that old puzzle.

Richard was shaking. He threaded his fingers together as the ship lined up next to the slowly tumbling capsule. The first thing they would do would be to stop the tumbling.

He came to himself long enough to make certain the live feed back to Earth had actually started. It had. One of the other astronauts and one of the observers were giving a play-by-play as they watched through a different portal.

Alicia Kensington, the modern day Walter Cronkite, had asked Richard to do the play-by-play, but he had known he would be too nervous. Yes, he was the celebrity, but he hadn't wanted to be at this moment.

At this moment, he needed privacy.

Eventually, as they worked to carefully slow the tumble, he made his way to the back, to the entrance of the hatch, watching on small screens as he passed. The tumbling stopped, and, next, the grapples' metal fingers found purchase near Apollo 8's hatch.

He stood still as that happened, terrified. One of his greatest worries, one of the scientists' great worries as well, was that the old ship would

disintegrate when touched. It had been through a lot, the theory went, and it might have been held together by next to nothing. A push from the grapppler, a touch of the hooks, the grate of metal against metal, might cause the capsule to come apart.

And then his great adventure would be over.

But the capsule didn't come apart. It held. In fact, it looked sturdier than the grapppler.

He turned toward the live feed, watching from one of the outside cameras, struck at the fact that the older ship looked so much stronger than the *Carpathia*. The *Carpathia* was built of lightweight materials, designed for maximum efficiency, both in space and in the atmosphere.

Apollo 8 had a thick sturdiness he associated with his childhood, the sense he'd learned from every adult back then from his teachers to his parents, that if something was overbuilt, it was better, it could survive more, it would be the best it possibly could be.

He smiled for the first time that day.

They had been right.

He stood outside the bay doors with Patricia Mattos, the chief archeologist. Her team waited behind them, shifting from foot to foot, obviously as nervous as he felt. They all wore their space suits, just in case there was a problem with the environmental systems when they went into the cargo bay, but at the moment, everyone held their bubble helmets. A few tucked their helmets under their arms, the way that the first astronauts used to as they walked to the rockets that would blast them into space.

No one spoke.

They watched the nearby screen, and listened to the scraping sounds within.

The scrapes did not go onto the live feed. Neither did the conversation of the astronauts out there working the grapppler—the grunts, the single-sentence acknowledgments, the occasional curse. Live feeds with live astronauts were NASA's purview. No matter what Alicia Kensington wanted, Richard was determined to keep some privacy here, some mystery.

The entire world could watch if it wanted to as Apollo 8 got loaded into the cargo bay. They just couldn't hear the discussions as the astronauts got it into position.

Susan had activated the cameras inside the bay as well, and started a second feed. The first came from outside the ship, showing Apollo 8 as it looked to the *Carpathia*. The second came from inside, showing, at the moment, the bay, and the backs of the astronauts, looking small against the vastness.

The cargo bay was spacious and empty. Even though it had its own environmental system, it had few other controls—just an extra door and an airlock for smaller items, and a series of overrides near the back of the room, in case something malfunctioned with the bay doors.

At the moment, the doors were open. The two astronauts, guiding Apollo 8 inside, wore their space suits and gravity boots. They looked like slimmed down versions of the men who had first walked on the Moon. Their bubble helmets were smaller and more efficient, their suits form-

fitting for ease of movement, the gloves less bulky. Even the oxygen units were different, threaded into the suit itself instead of hanging off the back like a pack a child would wear to school.

Accidents could still happen with the suits—the astronauts had to stay clear of the capsule and the grapples' metal fingers as much as possible—but they were less likely. Most people who died in space now did so because of their own carelessness, not because their suits ripped or malfunctioned.

Still, Richard watched this part nervously. This was the most dangerous part of the mission. One small bump, a mishandling of the grapples, a momentary klutziness on the part of an astronaut, could result in disaster.

He would never admit to the others that for him, a disaster would be the loss of the capsule somehow, not the loss of life. He'd be willing to lose his own life to bring this thing in; he hoped the astronauts would too.

A darkness filled the doorway, and then the astronauts moved away. The view on the outside camera made it seem as if Apollo 8 had pointed herself into the *Carpentaria* and gotten stuck. The view on the inside was a sort of darkness that could, when he squinted, resolve itself into the cone of the capsule.

The astronauts, moving near the doors, gave it all a bit of perspective, but everything seemed large and a little out of control.

Richard held his breath.

Next to him, Patricia Mattos was biting her lower lip. Her second for this part of the mission, Heidi Vogt, watched with wide eyes. Her forehead was dotted with perspiration much as Richard's had been earlier.

Anticipation made them all nervous.

He turned away from them and watched the screen. The scrapings from inside grew even louder—that unbearable squeal of metal against metal.

"I hope nothing's getting ruined," Heidi muttered, and one of the other scientists, someone whose name Richard couldn't conjure, nodded.

Finally, the capsule disappeared from the view of the outside cameras. Two of the inside cameras only showed the capsule herself. The other two cameras had partial views of the bay doors, which were easing shut.

Richard's heart started to pound. He still had fifteen minutes before he could enter the bay—fifteen minutes for the environmental systems to reestablish the artificial gravity. The temperature would remain low, and the atmosphere would remain a special mix to preserve everything. Richard's biggest fear was that they'd thaw out the craft and the bodies it held too fast.

He didn't want three famous—legendary—astronauts to explosively decompress on a live feed heading back to Earth. He was already in trouble in some circles for messing with a grave; he didn't want to be responsible for one of the most disgusting mistakes ever made.

He had promised America and, by extension, the rest of the world, that he would treat these men with respect.

He planned to honor that.

But first, he planned to free them from their decades-old prison.

He planned to be the first to greet Commanders Borman, Lovell, and Anders on the last part of their journey home.

\* \* \*

Susan gave them five minutes' warning before she opened the cargo bay entrance. Richard and his team of scientists put on their bubble helmets, turned on the oxygen in their suits, and started the small heaters to keep their own bodies warm.

If he hadn't done this before, he would have protested the use of the heaters. He was hot enough at the moment; nervousness had made him sweat again. But he knew once inside the bay, he had only a few hours before the deep cold would permeate his space suit. He wanted as much time with the capsule as he could get.

He helped Heidi strap on her helmet, then checked Patricia's. He gave the other three scientists a cursory glance, but they seemed more competent with the equipment than the archeologists, which made sense. Archeologists usually didn't have to wear space suits to look at remains. They simply dug into the ground.

Here, they'd be opening a cold ship, preserving the scene, and beginning an intellectual voyage of discovery, one that could, hopefully, retrace everything that Apollo 8 had seen.

He could hear the rasp of his own breathing, and that reminded him to turn on the audio chips outside the helmet. The audio chips were an addition for this mission. Most of the time, astronauts didn't need the external sound sensors.

But he'd had them added to all of the helmets. Even though the team would use their internal communications equipment to keep track of each other, he figured they all wanted to hear this process as well as see it.

He wanted as many of his senses engaged as possible.

Once everyone was suited up, and Susan gave the all clear, he opened the single door leading into the back of the cargo bay.

The bay looked different, smaller, with the capsule inside. It was also darker since the capsule blocked much of the light from the center of the room. The two astronauts stood near the side of the capsule. They weren't going to be active in this part of the mission, but he knew they wanted to be here, to see everything.

He handed one of them a video camera. Even though there were cameras inside the bay, and at least two of the scientists were filming the entry, Richard figured he couldn't have enough film of this historic moment.

He straightened his shoulders and smiled at the team, even though they couldn't see his face. "Let's go," he said.

It was, all in all, a belated command. The archeologists were already filming, taking samples from the exterior, finding ways to preserve as much of the stuff surrounding the ship as possible.

As excited as he was, Richard knew this was important, just as he knew that proceeding methodically was important.

He had little to do in this early stage, so he walked around the capsule slowly, taking it in.

The dent in the cone was uneven, almost as if something larger had hit it with a glancing blow. The area around the dent was worn, and the metal looked fragile. If he had to guess—and that was all he could do at this point—he would have thought that the damage there was quite old.



What he had originally thought were streaks were tiny holes all along one side. The holes were very close together, almost as if the capsule had been pelted with gravel. Only Richard knew that gravel would have done much more damage; more likely, it had gone through some sort of rock belt as fine as sand.

His stomach lurched—excitement now, not nervousness. The capsule had quite a story to tell. All these little details, the burn marks near the engine, the long score against the metal on one side as if someone had run a car key against it, the little holes and dents and divots, were records of everything that happened to this capsule.

In some of those dents and digs might be dust from civilizations long gone. Evidence of life from some other planet, or a bit of ore that no one had believed existed this far out. There might be as yet undiscovered chemicals, minerals, biological matter, things that boggled the human imagination.

They could all be on this capsule, smaller than anything he could see through the reflective plastic of his helmet, more important than anything he could imagine.

Finally, he rounded the capsule and stopped by the small hatch. He and his team on Earth had discussed the hatch several times. They had studied the specs from the various capsules and had even visited the two that were in museums.

Since the fire on Apollo 1 that killed three astronauts, the capsule hatch opened outward. But it was designed so that in space it was sealed shut.

Richard and his team knew that they'd have to cut the hatch open, and they needed to do so in a way that would cause the least amount of damage. But, they agreed, he would try to open it by hand first.

The scientists had photographed and then cleared an area around the hatch. Richard's stomach lurched again—he was so glad he hadn't eaten anything—and he tried not to look at the light from one of the cameras that someone was pointing at his face. He knew they could only see him in profile, and even then they couldn't get a clear reading through the plastic in his helmet.

No one would know how close to tears he was.

He had waited a lifetime for this.

He wished the internal mikes were off. He wanted to whisper, "Welcome home, gentlemen," but he was afraid that not only would his team hear him, but so would everyone who watched on Earth.

Instead, he gripped the handle, and yanked.

To his surprise, the hatch moved. Just a little, but it moved all the same.

Some dust and particles fell off the capsule's frame.

He caught himself before he cursed.

He looked at the others and thought he saw surprise through their helmets. They pushed closer to him. The light from the camera was on his superfine white glove.

He braced his other hand on the capsule's side and then pulled again.

The whole capsule shook, but the hatch moved enough that he could see its outline on the frame.



"My heavens," one of the women said. "We aren't going to have to cut it."

Her voice held a mixture of shock, awe, and relief, precisely the same emotions that Richard was feeling.

He pulled with all his strength.

This time, the hatch fell open, banging against the capsule with a loud clang. Richard stumbled backward, freeing his hand at the last minute, narrowly avoiding being part of that bang of metal against metal.

He hoped he hadn't destroyed anything near the hatch.

The interior was shrouded in darkness.

The team, bless them, didn't move forward, but instead waited for him to get his feet beneath him. He stood upright, still feeling slightly off balance from loosening the hatch, and then headed for the capsule.

He had to remind himself to breathe.

He might find anything in there, from skeletons (depending on how long the environmental systems survived) to carcasses exploded in their environmental suits to body parts strewn throughout the interior because the capsule had somehow gone through explosive decompression.

He had ordered that no one film the interior until he gave the signal. He now hoped that the astronaut he'd given the camera to remembered that instruction.

Richard took a small flashlight one of the archeologists handed to him, then leaned through the hatch.

The interior was dark and, for a moment, his breath stopped in his throat. He couldn't see the astronauts. He braced himself, figuring he'd find parts of them all over the equipment and the metal interior.

He tried to keep his breathing regular, so that anyone listening wouldn't think something was wrong. He shined the light, saw frost on the panel displays, wondered how it got there, then remembered there had to be a lot of biological material in here, and that material had had some time—he wasn't sure how much—to grow.

He hoped some of what he was looking at wasn't the astronauts themselves.

Then he shone the light past the couches to the so-called computer display to the flight equipment. He saw bags against the side, the pee-tube curled up against one side, and a crumpled food container near one of the storage units.

He stared at all that for a moment, knowing something was wrong, feeling that something was wrong. His subconscious saw it, but his conscious brain hadn't caught up.

He shone the light one more time, registering how small the space was; he wondered how grown men could have survived in this small environment for even a few days, let alone the rest of their lives.

Something had been braced under one of the couches, wrapped in some kind of metallic heat blanket.

Something had been placed there.

Then his consciousness caught up. He saw no evidence of explosive decompression. He saw no evidence of any kind of traumatic sudden end to Apollo 8's mission.

But he saw no evidence of a slow death either, aside from the food con-

tainer and whatever it was stored under that couch. His hands were shaking, making the light shake.

He examined the interior one last time.

Nothing.

No men, no space suits, no evidence—except those bags and that food wrapper—that anyone had ever been inside this capsule.

"What do you see?" Susan asked from her vantage in the cockpit. The scientists, apparently, could wait him out, but the pilot couldn't.

"Nothing," he blurted.

"Nothing?" she asked. "What do you mean 'nothing'?"

"I mean," he said, "they're gone."

The theories came in from all over. The scientific illiterates, the ones he called Flat Earthers, were convinced that friendly aliens had arrived and taken the crew somewhere special. Borman, Lovell, and Anders were now enjoying a new life on some unnamed planet or back on Earth in secret (and unknown) identities at Area 51. Or, Susan had stated sarcastically, they were in that zoo in the *Twilight Zone*.

Others believed that Richard was too hasty—that they had died in the capsule and he just hadn't seen it. Some wag suggested (and it got credence on the 24-hour news channels for a while) that the astronauts had moved to another dimension, just like in some *Star Trek* episode.

In fact, much of the chatter that filtered to the *Carpattia* focused on old science fiction scripts, either from shows like the *Outer Limits* or *Time Tunnel* or *Land of the Giants*. Apparently some of the most renowned scientists of the day were spouting off on the cable channels, and so were some of the better known science-fiction writers.

Richard ignored the chatter. Susan followed it as if it could give her the truth of her experience in space by filtering it through the talking heads on Earth.

The scientists spent days checking the interior for evidence of explosive decompression and found none of it. They did find the mission's carefully protected garbage, which included the feces that they hadn't discarded into space—clean to the last ("from that," Patricia said, "we can determine how long they lived.")

The scientists found evidence of vomit ("Someone had gotten space sick," Heidi said. "Probably Anders," Richard said. "It was his first experience with zero g.>").

But they didn't find much else; certainly not brain matter or blood or bits of bone.

They also didn't find evidence of alien arrival—"If it came," someone said, "it came in a form we don't recognize as living matter."

What they did find, carefully wrapped in a blanket and as much heat shielding material as possible, was the Hasselblad camera the astronauts had taken with them, plus rolls and rolls of film.

Richard would have the film carefully developed and preserved if possible, but he knew, even without the scientists saying much of anything, that the chances of photographs surviving intact for so very long in the radiation and the extreme conditions were next to none.

The astronauts themselves had probably known that and had done what they could to protect it. Along with it were some letters to the families written on the few sheets of fireproof paper the astronauts had brought along. The flight plan was also wrapped with the camera, and on the back of that paper was careful handwriting.

Richard recognized the quote. It was from Genesis:

*In the beginning, God created the heaven and the earth; and the earth was without form and void, and darkness was upon the face of the deep; and the spirit of God moved upon the face of the waters.*

*And God said, "Let there be light," and there was light.*

*And God saw the light, that it was good.*

*And God divided the light from the darkness.*

*And God called the light Day and the darkness He called Night.*

*And the evening and the morning were the first day . . .*

It went on, quoting the entire passage. Whoever had copied it had done so in a clean hand. Although, looking at it, Richard wasn't sure it was copied. He wondered if someone had written it from memory.

He stared at it a lot as the scientists worked, his gaze always falling on the last few lines:

*. . . And God called the dry land Earth, and the gathering together of the waters called the Seas.*

*And God saw that it was good.*

And then a hasty scrawl:

*God bless all of you, all of you on the good Earth.*

Richard was the one who finally told the scientists what happened. He figured it out using four pieces of evidence: the scrawls on the back of the flight plan—"A goodbye note," he said—the missing space suits, the missing bodies, and the unlatched hatch.

He gathered the entire team into the cargo bay and stood as close to the capsule as he could get. By now, days later, the temperature had returned to normal. The capsule had been scraped and examined and reviewed; most everything that had to be stored had been.

The crew still wore breathing masks—they had to, in case something in the particles caused allergic reactions or other kinds of reactions (and, the scientists insisted) to keep the particulate matter on a flat surface, so that it could be removed.

Richard held the flight plan, wrapped as it was in protective plastic, and stared at it before he even spoke to the team. When he did, he explained his thinking.

"They wrapped up everything they considered important."

Or maybe, he thought to himself, the last person alive had done that. Probably Borman as captain of the mission; old nautical traditions died hard. Richard had seen Borman's handwriting and had a hunch it had been Borman who had written the passage from Genesis on the back of the flight plan.

"Then," Richard continued, "they put on their space suits, unlatched the hatch, and evacked."

"What?" Heidi said. They weren't being filmed now. The live feed to Earth had ended days ago. "Why would anyone do that?"

Richard glanced at the capsule. "They knew they were going to die."

"You think it was a blaze of glory?" Susan said.

He shook his head. "I don't think they were being dramatic. They were astronauts, for heavens' sake. They had a choice between dying in a tin can and dying in the freedom of the great unknown."

"They climbed out and pushed off into space?" Patricia asked. "Is that sane?"

"Does it matter?" Richard asked. "They had only two choices of how to die. They took the one they considered to be the best."

"But that took out all possibility of a rescue," one of the younger scientists said.

Everyone looked at him as if he were crazy.

"They knew they couldn't be rescued," Richard said. "Not with 1968 technology."

He thought of all the movies made in the 1970s, movies about astronauts being rescued from the Moon, astronauts being rescued from deep space, astronauts being rescued from orbit. The entire country—the entire world—had been haunted by their loss, never realizing that the men had taken the choice away from the rescuers' and their imaginations long ago.

"So they drifted into nothingness," Heidi said.

Susan smiled at her. "It's not nothing," she said quietly. "It's the greatest adventure of all."

Great adventure or not, Richard now knew that the *Carpathia's* mission was over. One of the archeologists asked him if the ship would go after the bodies, and he had stared at her, trying to remember her specialty was ancient societies, not modern ones.

"Finding the capsule was a miracle," he said. "All three of them will be in different orbits, if they still exist. Finding a body in the vastness of space is like finding a needle in a haystack."

Maybe a needle in a galaxy's worth of haystacks.

Still, his own answer echoed in his head. And while his scientists grew excited about new discoveries made every day on the *Carpathia*, bits and pieces of the Apollo 8 puzzle, he had already gone beyond that.

He needed to figure out how to find three needles.

How did a man search a galaxy's worth of haystacks?

And more to the point, how did he succeed?

## Part Two: 2018

"We have something," the researcher said.

Richard pulled up a chair, letting the movement hide his irritation. Of course they had something. If they hadn't had something, he wouldn't have flown halfway across the continent to get here.

But he didn't say anything. The researchers in this wing of the Asteroid Collision Project knew that Richard wasn't really looking for asteroids on a collision path with Earth. He was looking for three bodies, jettisoned

into space beyond the Moon sometime between December 27 and December 31, 1968.

This wing of the project—the secret wing—had its own equipment. The rumor in the ACP was that this wing, called ACP-Special (ACP-S), had military and spy satellite connections. The regular ACP employees figured that the ACP-S were searching for bombs or weapons or materiel that other countries had launched into space.

ACP did have a military arm; it needed one, in case one of the asteroids on a collision course with Earth was large enough to threaten human life or was small but on a trajectory that might harm the transports to the Moon Base.

It had been a long time since he had been in this room. He hadn't been to the ACP since it had been built nine years before. This room, and the equipment inside, had layers of security protocols just to reach the interior.

As he arrived that morning, he had felt as if he were going into one of those *Dr. Strangelove* bunkers that he used to see on television as a child; it made him wonder just how paranoid he really was.

The young researcher sitting next to him was, according to his nametag, David Tolemy. Richard found his gaze going to that nametag over and over again. He'd heard the researcher's name mentioned several times in the last twenty-four hours, but somehow he'd always expected the spelling to mimic the Pharaoh's—Ptolemy.

The researcher looked nothing like a pharaoh. He looked like a barely thirty-something man who spent most of his time behind dozens of sets of locked doors, staring through layers of equipment that led him to space. Tolemy had a special cart next to his equipment. It contained both a small refrigerator and a tiny gourmet coffee maker (although Richard's generation was the only one that called that stuff "gourmet" anymore; most people simply called the variety of drinks with cocoa beans in them "coffee").

As Tolemy's fingers fluttered over his flat-screen control panel, one hand would slip to the cart, grab a large soda/iced coffee container, and sip from the straw. It was an obsessive, unconscious maneuver, that Richard had seen a lot from his indoor techs.

He both hated it and felt powerless to do anything constructive about it. He hired the best minds of all generations, and if he'd learned anything in his decades of running the most creative corporations in the country, it was that the best minds came with more baggage than he'd ever thought possible.

When he'd mentioned it to his closest advisor after a visit to the Gates wing in Seattle, she'd laughed. *You have baggage*, she said. *Isn't that why you never married?*

He'd never married because he didn't have time for small talk, and he didn't feel right vetting women just to see if they were interested in his money. He had no desire to have children. His legacy, he knew, was these corporations and all the discoveries he'd made on his way to fulfilling his childhood dream.

He pulled the chair closer to Tolemy's wide screen, careful to stay away from the cart.

"I was warned not to waste your time," Tolemy was saying, "but I want to lay the foundation. Stop me if you know this."

He launched into a verbal dissertation about evac points and speed, about trajectories and distances in space. Richard knew this; he was the one who'd designed the program after all, but he listened just the same. He wanted to hear how Tolemy had come to his current conclusions.

After twenty-five minutes of illustrated monologue, what Richard learned was this: Tolemy guessed that the astronauts took the last possible evac point. Their ship's oxygen was gone; they only had their suits left. Maybe they had put on the suits, and then realized they wouldn't even be able to see each other's faces as they waited for sleep to overtake them.

That last was Richard's fanciful addition. He'd been in the old suits; Tolemy hadn't. He knew how isolating they felt. Isolating and cramped.

"Add to that being inside a tiny capsule," Tolemy said, "with the windows already clouding, and who can blame them for leaving?"

Who could, besides Richard? And he knew that his blame was simply self-interest—the unwillingness of an obsessed man to lose his original vision, long after it had truly disappeared.

Unlike the other researchers, Tolemy hadn't tried to prove who evacked first. Borman to show it could be done? Or Anders because he was the junior member of the team? Had Lovell gone first because he was more of a cowboy than the rest?

The original researchers had contended that it mattered, that mass, height, and the strength with which the astronaut pushed off determined where the others ended up.

Tolemy claimed that none of that mattered; that they were all weak and dying and that they would have pushed away with little or no strength.

"I figured that the first one would be the easiest to find, and that's what I concentrated on," he said.

He had planned to take the last possible evac point and work backward, after exploring each area from top to bottom. He computed maximum speed and drift; he computed all the possible directions. He developed a region of space where he believed the first evacuee would be, and he searched, painstakingly, for two years.

"I found a lot of possibles," Tolemy said, "but they didn't pan out."

He spoke of months as if they were moments. Richard leaned closer to the screen, feeling a respect for the young researcher that he hadn't felt before. Tolemy shared some of his obsession, whether he admitted it or not, or Tolemy wouldn't have sunk so much time into this, no matter how much he was being paid.

"Then I saw this one." Tolemy used a pointer to touch a small mark on the side of the screen.

He amplified the image, but, even at full magnification, Richard couldn't see what Tolemy had. It looked no different than all the other small space debris Richard had looked at over the years, some of it in the early months of this very project.

"Why is this one special?" Richard asked.

"The reflection," Tolemy said as if it were obvious. "Let me show you some time lapse."

He clicked on the image, then clicked on it again. It changed from a light mark against the blackness of space to a slightly brighter mark, but Richard really didn't see the difference.

"I guess I'm not trained well enough," Richard said.

"Okay," Tolemy said, lost in his own excitement. "Let me show you a few other things."

He opened up several more windows, all of them with astronauts building the space station that was completed in orbit at the end of the 1970s. He would click on one astronaut and then shrink the image. When he was done, the astronaut's image looked like the one in the upper corner of the screen.

What Richard wasn't sure of was whether if you took an image of a meteor and did the same thing would the meteor look like the tiny image in the corner too.

He said something to that effect—mumbled it, really, because he was concentrating and not paying attention to stroking the researcher's ego.

"Oh, no," Tolemy said. "They're all different. There are components in those early space suits—particularly the plastic in the helmets—that aren't used any more, and they don't occur naturally that we know of. When light reflects off those, it's distinct."

Richard's expression must have showed his skepticism, because Tolemy grinned.

"My bosses asked the same thing before they called you and so I showed them this."

It was a light spectrum chart, showing how various materials reflected the sun's rays outside of the Earth's atmosphere. According to the chart, the plastic in the helmet, particularly on the visor, did have its own signature. And, somehow, young Tolemy had gotten a reading from the bits of light given off by the image in the upper corner of his screen.

"You have to understand," he said as he explained all of this to Richard, "I worked this out over weeks of study."

"You have to understand," Richard said. "If I take action based on your light spectrum analysis and your speculative equations, I'm going to spend millions of dollars, risk several lives, and take many months of time. You have to be sure of this."

Tolemy took his left hand off the console and pushed the cart away with his right. He turned slightly in his chair.

"I think you were the one who called this searching for a needle in a galaxy full of haystacks," he said.

Richard nodded.

"Well, I found something small and thin and made of metal. You gonna check it out?"

Richard smiled. "When you put it that way," he said, "I think I will."

The trip toward the object that Richard now called the Needle took both more preparation than the trip to the capsule and less. More because, deep down, Richard had never expected to find the astronauts, so



he hadn't done some of the basic imaginings he'd done for the capsule trip, and less because modern ships were so much more efficient than they had been eleven years ago.

For one thing, cargo runs from Earth to the Moon base had become common. Trips out of the atmosphere were even more common, with wealthy and upper middle-class tourists opting to stay in orbiting hotels.

The Needle never even approached Earth orbit. He floated out there for fifty years, following a predetermined path of his own. At his closest point to Earth in exactly eight months and one day, he would still be a hundred times the distance from the Earth to the Moon.

Richard had ships that could easily go beyond the Earth/Moon run. One of his companies was on the forefront of Mars development. NASA had bought several of his deep space ships (not an accurate name, Richard knew, but NASA liked the sound of it) for their first manned Mars missions, and several other companies had bought more of those ships to scout Mars locations for another base.

Richard had stayed out of most of that planning. He didn't really care about Mars. His interest was still in the needles and the haystacks and space itself, not in colonizing the solar system. He figured someone else could take care of that, and until his meeting with Tolemy at ACP-S, he had let them.

After that meeting, he'd seen his mistake. The ships his companies had designed were for transport—humans, cargo, materiel—not for maneuvering or quick travel. To get to the Needle and match its orbit, he'd either have to design his own kind of ship or buy one from one of his far-sighted competitors.

And he only had eight months.

So he bought several of his competitors' ships—something that took more middlemen than he had thought it would. His competitors thought he was trying to steal proprietary information or at least copy proprietary technology, and while that might be a side benefit of this trip, it certainly wasn't Richard's intention.

Instead, he tried to make the ships as Richard-friendly as possible.

Deep Space Darts, as these ships were called, were designed for long travel at great speeds. All engines and fuel, little interior room. The ships' accommodations were cut down too much for his tastes. Richard examined half a dozen from various international companies, and worried about how travel would feel—cramped and narrow and uncomfortable, not something he wanted to experience, even though he was an in-shape fifty-eight. He needed some kind of cargo area with a separate environmental system, and a good cabin.

In the end, he bought one of his competitors' largest darts and gave his own team two months to retrofit it. He made certain the ship was supplied with the right equipment—a state-of-the-art grapppler (complete with multiple hand sizes), automatic lifeboat technology, and an up-to-date medical unit. The dart had the cargo bay he needed, but not a large captain's cabin. Nor did it have a relaxation area for the crew.

Richard wasn't bringing a large team this time—just himself and a few astronauts to help him wrestle the Needle from space. He also brought a

biologist and a forensic anthropologist with an interest in space. If he got the body, most of the tests would be conducted on Earth in one of his labs—no need to do the work in cramped conditions—but he'd be able to report a few breakthroughs while still in space.

No live feed this time. There was too big a chance for error. He didn't want to pull up beside the Needle only to discover that it was a bit of mislabeled space debris.

That's what he worried about most: discovering nothing. Some early ACP-S missions led him directly to space debris and, fortunately, he hadn't recorded those either. He hadn't been on a trip for an ACP-S identified project in eight years, and he worried about this one. He had other scientists double-check Tolemy's information, but they kept coming up with the same result:

They couldn't verify that it was a Needle. They couldn't guarantee anything.

In the end, he had to trust his own response. Tolemy's information was the first in almost a decade to convince him.

He wanted to give this one a chance.

On the ride out, he spent most of his time doing simulations with the grapppler. He wouldn't run the grapppler to bring the body in, if indeed what they'd found was a body. But he was going to help the team this time. He couldn't stay away.

His closest advisors had insisted that a single, multimedia reporter with impeccable credentials be included on the flight. If the dart didn't find a Needle, the reporter would write everything up as an experimental trip. She wouldn't know the real mission until it was achieved—if it was achieved.

She came along only with the agreement that she could talk with Richard on the way back. He would give her unlimited, exclusive access.

Any good reporter would jump at that, and one did. Helen Dail, a woman who had three Pulitzers for journalism, spent most of her time interviewing the crew. She also explored the dart—what little of it she had access to—and lived up to her part of the agreement by not interviewing the astronauts, science team, or Richard.

He could see her storing up questions, though. She was old enough—maybe forty—to make sure she had a paper back-up, but she was also heavily wired. She had digital cameras and PDAs and more notebooks than he'd thought possible. She had met her weight limit for the dart not with clothes or personal items, but with equipment.

She made him nervous. She was good enough to figure out what he was after, even if he never found it, even if no one ever told her what the mission was.

He stayed out of her way as much as he could.

Ten days past the Moon, the dart had reached its target destination. The little ship wasn't equipped with many cameras or long-distance scanning equipment (not that any of it was yet at the level Richard wanted it to be). They were close enough to confirm that something was in the position that Tolemy had predicted, but not close enough to confirm that something was (or had been) human.

"Let's get close," Richard said to the pilot. He was in the cockpit along with the pilot and co-pilot. The science team was in the cargo bay, and the astronauts were suiting up. He would wait to suit up until the last minute.

He didn't want Helen Dail to know he cared enough about whatever this was to suit up.

Over the next long half hour, the pilot took the dart into camera range: The item appeared on the screen, large and whitish gray. It tumbled—a slow spin that seemed like something it had done for a long, long time.

It was long and slender, and could very well have been a human astronaut. But Richard couldn't see a helmet, nothing obvious that told him what they had.

Richard manipulated the external cameras himself, trying to catch all sides of the object.

Finally he saw what he needed—a glint of sunlight off a thick plastic visor.

His breath caught.

"Well?" the pilot asked. "Should we scrub?"

"No," Richard said. "We have a go."

He hurried out of the cockpit, careful to close the door behind himself, wanting to keep Dail out. Then he hurried to the cargo bay where the astronauts waited. They were watching the same image playing over and over again.

"Shouldn't be hard," Mac McFerson said as he watched. "One of our simpler maneuvers, actually."

Richard slid into his space suit, his hands shaking.

"So long as we don't grab the thing too tight," said Greg Yovel. "Don't want to damage it."

"Maybe we should tether, do a walk, and guide it in," McFerson said. He was a bit of a cowboy, which was why Richard wanted him along.

Richard turned, helmet in hand, and looked at the slowly spinning Needle. *Who are you?* he wondered. *Anders? Borman? Lovell?*

His heart was pounding. "Let's just bring it in as we planned and hope for the best."

McFerson made a small disapproving noise in the back of his throat.

They'd follow the procedures Richard had established with the capsule—keeping the bay cold once the body was inside, making sure that nothing in the process damaged the body outside of what had already occurred in space.

"Greg," Richard said, "you run the grapples."

"You and I will handle the door," he said to McFerson. "Magnetize."

Everyone pressed a button near the wrists of their suits to magnetize their boots. He felt a sharp tug on the bottom of his feet, tried to lift one, and felt the magnetic pull.

"It's a go," he said to the pilot.

The dart vented atmosphere from the cargo bay—away from the Needle, so as not to push him off course.

Greg slipped his hands into the net that ran the grapples, his body tense. Richard stood behind him, watching the imagery on the screen.

First, Greg had to stop the Needle from spinning. Then he had to wrap the grapples' long fingers around the center of the Needle and slowly bring it toward the bay doors.

Once the Needle was close, the doors would open and Richard, along with McFerson, would grab the Needle and bring it inside.

The first part went according to plan. Greg managed to slow the spin—not stop it entirely, but bank it enough so that the Needle wouldn't turn hard and damage itself against the grapples' fingers.

Then he grabbed the Needle around what should have been its waist.

"It feels like this thing is going to slip," he muttered, the words coming through everyone's helmets. Rachel Saunders, the forensic anthropologist, walked toward the screen, but the other scientist pulled her back.

Richard wanted to go there too—he wanted to slide his hands into the gloves that operated the grapples from a distance—but he knew he couldn't compensate for any errors.

The Needle—if indeed that's what it was—did look slippery and unstable. The slipperiness came from its absolute rigidity; the unstable part from its tiny size. Richard had never seen anything so small in the grapples before.

Greg leaned into the gloves, his body as rigid as the Needle's. Richard could feel the fear coming off him in waves.

"Positions," McFerson said.

Richard jumped. He had forgotten to give that order. Rachel and the other scientist moved to the edge of the bay, grabbing onto the handles just in case. Richard took his spot near the door, holding a handle as well. It felt cold through his thick glove, but he knew that was just his imagination; he couldn't really feel anything except the sweat on his palms.

"Open the door," Greg said, his voice taut.

McFerson hit the controls before Richard could reach them. Or maybe the pilot had done so from inside the cockpit. He wasn't sure.

The bay doors slid open, and there it was—the grapples—long bits of metal curving out toward the edges of the solar system, unfiltered sunlight reflecting off them, so bright that he wanted to look away.

But he didn't. Because in the center was something whitish gray. Whitish gray and long, like a man's body would be, only the knees were slightly bent and so were the arms.

Richard let out a small breath and it sounded like a sigh of relief. Or maybe he'd heard the sigh through his communications equipment, coming from someone else.

The grapples' arms came closer to the door than he would have liked. Richard swung out, as he'd been trained to do, keeping his magnetized boots on the floor and one hand on the handle. McFerson did the same from the other side.

The suit had pockmarks and one large hole that went through the middle of one leg, but it was mostly intact. It faced away from them. Richard recognized the oxygen equipment, so bulky it made the original astronauts look as if they were about to topple over backward.

"Wow," McFerson said.

Richard didn't say anything. He had to be cautious as well. He was less

worried about himself—he knew that if he lost his grip and his magnetization he would tumble into space, but someone would get him—than he was about breaking the Needle.

Someone, at the beginning of this mission, had called the Needle a corpse, and, while Richard vehemently objected to the characterization, it had some truth. This body was breakable the way ice was breakable. Grab it wrong, and a part would snap off.

Richard reached inside the grapples and slid a hand underneath the arm closest to him. Then he gently pulled backward. McFerson did the same.

The grapples moved with them—Greg was letting them control the speed. It had reached the mouth of the doorway when McFerson said, "Lift up."

There wasn't really an up—only an imagined up—but Richard didn't question. He'd done simulations and he knew, in this case, up meant toward the top part of the door.

He lifted just in time to get the Needle's bent feet past the lip of the dart.

"God," Richard breathed. "That was close."

McFerson said nothing. He used both hands to hold the Needle. Richard did the same, keeping one hand on the Needle's chest, bracing it, and the other under the Needle's arm.

"Got him," McFerson said, even though Richard hadn't given him a go-ahead.

The grapples fingers loosened, and Richard held fast, using only his boots for balance.

The grapples slid out of the bay.

"Close doors," McFerson said, and he didn't sound as calm as he had before.

The doors eased shut, and they were inside the bay, holding a man frozen in position fifty years ago.

Rachel hurried over, awkward in her magnetized boots.

She joined them, bracing the body, and helping them move it toward the center of the bay. Richard could hear her breathe. She was frightened—or maybe awed—he couldn't tell.

He couldn't tell how he felt either, except that somewhere in the middle of this mess, the object he had called the Needle had become a body.

He was holding one of the astronauts from Apollo 8. His theory had been right.

They had evacked.

And he still had two more to find.

But this one entranced him.

It had a name, sewn onto the exterior of the space suit. Lovell. That made sense to Richard. Everyone else expected the first one out of the capsule to be the lowest ranking astronaut on the mission, but Richard knew better.

Borman wouldn't have gone first. He would have stayed with his vessel as long as possible. Lovell, the daredevil former test pilot, who saw

himself at equal rank with Borman, would go first to show it could be done.

To show all three that fear could be conquered.

It wouldn't have been right to send the rookie out first.

The bubble-shaped helmet was intact. That was the first thing Richard looked for as he, Rachel, and McPerson eased the body away from the bay doors. The helmet was intact and the body inside had mummified.

It looked like the mummies that came from Egyptian tombs—after the poor things had been unwrapped. The face was hard and leathery, the eyes gone, the mouth open in some kind of rictus.

But worse than that, this one was burned.

Richard had been told to expect radiation burns, but he wasn't sure how they'd show up. They showed up in patches, holes in the skin.

"Good thing we got him," Rachel said. "I don't know how many more decades these suits would hold up."

Richard didn't respond. The suits would hold up as long as they remained intact. Obviously, the hole in the leg of this one came so late that there was no more oxygen, no more environment inside it.

When they reached the far wall and had the body face down over the examination table that would hold it, he said, "Now we can have gravity. Bring it up slowly."

"Roger," the pilot said.

Then Richard felt a buoyancy he hadn't even realized he had vanish. He was heavier, and his ankles ached from the boots. The body in his hands slowly settled onto the table, face down, the large backpack upward.

"Let's get him recorded," Richard said.

Recorded. Saved for posterity.

It was time to call in Dail.

Richard told the pilot to have Dail watch from the screens outside the cargo bay.

The recording and cataloging was mostly a job for the scientists, and once Richard stepped back from the body, he would let them go at it. But he made some notes of his own.

The way the boots shone in the bay's lights. The still-bent limbs. The face, unrecognizable. And the suit, as familiar as the one he wore, because he used to stare at the ones in the Smithsonian.

Puffy and bulky, unbelievably difficult to maneuver, this suit had somehow protected Jim Lovell's body for half a century. The gloves made his hands look almost small.

The helmet with its thick plastic built to resemble glass. The old American flag on the arm, with only fifty stars—no Puerto Rico yet—making this seem like a suit lost to time.

And yet so real.

Richard could feel the suit's solidness through his own gloves, knew that some of that came from the frozen corpse inside.

He thought of the outcries on the original mission, the fact that they were desecrating a grave. No one felt that way any more. He doubted anyone much thought of the Apollo 8 astronauts any more.

Yet here was one, big as life. They would think about them once again, at least for a while.

Richard hadn't carried Jim Lovell, still alive, from the capsule. Nor had he brought the man into the dart with a fireman's carry, hoping to retrieve a long lost soul.

But he'd done the best he could.

Maybe the only thing he could.

The buoyancy Richard had felt just before the gravity had turned back on never really vanished. He felt buoyant still, as if something lifted him ever upward.

When they brought the dart back, and he'd finished all the interviews (*How had you known where the astronaut was, Mr. Johansenn? Is it worth the expense, bringing a long dead man to Earth? Why didn't you consult the families?*), he went back to ACP-S to consult with Tolemy.

"How hard do you think it'll be to find the other two?" Richard asked.

Tolemy shrugged. He looked a bit more haggard than he had before the mission. He'd had a lot at stake on the mission's success, but it didn't look as if the success had helped him. If anything it seemed to have depressed him.

"I've been thinking about it a lot," Tolemy said. "I'm pretty sure it'll be harder."

"Harder?" Richard hadn't expected that answer. He'd thought Tolemy would tell him it would be easier now that they knew what to look for. "In addition to the orbit we mapped for the capsule, you have two more points—the place where we found Lovell and the place where we found the capsule. You can make some kind of grid. We'll know in general what region of space the other two will be in."

"I've already done that," Tolemy said.

He ran his fingers along his console, brought up a new screen with the Moon and Mars and the rest of the solar system. An entire area between Venus and Mars was colored in red.

"That's the probable zone," he said. "But here's the problem."

He overlaid a green bubble, even larger, on top of the red.

"We made some assumptions to find Lovell. We assumed that we were getting the first astronaut at the last possible evac point. We assumed that they waited until the very end to evac. But what if Lovell waited until the end? What if the other two went days ahead of him? What if he planned to stay in the capsule and changed his mind at the last minute?"

Richard shook his head. "He wouldn't do that."

"You don't know that," Tolemy said. "Any more than I know which direction the astronauts went when they stepped out of the capsule. More than likely, it was tumbling slightly. They could have gone in any direction, with any kind of speed. If anything, the search area is now bigger. We'll defeat ourselves if we only look in the red part."

"It can't be bigger," Richard said. "We know some of the path now. That narrows it."

Tolemy shook his head. "I watched the vids you made of the rescue. You were worried about losing Lovell, about sending him off the small path



you'd charted for him just by venting atmosphere from your cargo bay. Imagine if some other ship had done that. Or if a small rock had hit with enough force to push him in a completely different direction without making a hole in his suit. Or if he had vented oxygen on purpose, propelling himself in a particular direction to give himself a sense of control? We don't know. I don't think we'll ever know."

Richard leaned over and shut off the map on Tolemy's screen. This was not the man he'd seen before the mission. That man had been certain of his numbers, worried that he'd made the wrong assumptions, but sure enough of himself to insist that his bosses bring in Richard.

"What's changed?" Richard asked gently. He tried to control his impatience. He didn't like interpersonal relations—he'd never been that good at them. He usually let his staff handle that.

Tolemy glanced at him, about to say "nothing." In fact, the word had formed in his lips when something in Richard's face must have stopped him.

"It was just luck," Tolemy said. "Finding Lovell. It was luck."

Like the press had been saying. Like Tolemy's boss had said when the mission came back, mostly because he couldn't take credit for a mission he hadn't approved of.

"You said it," Tolemy said. "We found a needle in a galaxy full of haystacks."

"Because we looked," Richard said. "Most people would hear the odds and give up. But we looked."

Tolemy gave him a frightened glance. "It took ten years of round-the-clock work by some of the best minds, and it was me that found him. The new kid."

"The new kid who worked harder than everyone else," Richard said. "The kid who believed in himself."

Tolemy shook his head. "That's the thing. After the mission left, I didn't believe any more. I was so convinced that all you would find was space debris that I nearly fell apart. If someone had died up there —"

"It would have been on my head," Richard said. "Not yours."

Tolemy nodded, but Richard could tell the young man didn't believe him. Tolemy wasn't willing to accept his success.

Richard stood, his patience nearly gone. He started to turn away, and then he stopped as an idea hit him.

"This has been part of your imagination for a long time, hasn't it?" he asked.

Tolemy looked up at him. Richard hadn't noticed before, but Tolemy was balding right at his crown. He didn't look quite so young any more.

"What has?" Tolemy asked.

"Finding one of the astronauts. You'd imagined it, you dreamed of it, you just didn't expect to do it."

Tolemy bit his lower lip, then shrugged one shoulder. "I guess I didn't."

Richard patted that shoulder. "Neither did I. And yet we did it, didn't we?"

Tolemy frowned, as if the idea were new to him. Richard walked away, hoping that little talk would be enough. Tolemy had a gift, whether he re-

alized it or not. That imagination, that way of looking at the solar system, at the small details, was unique.

Richard doubted he could find that combination again.

### Part Three: 2020

**A**nd he didn't, at least not in the next two years. Tolemy tried to find Anders and Borman, but flamed out quickly. Six months after the success of the Lovell mission, as the press called it, Tolemy took an extended leave. Then he quit, citing personal reasons.

His staff asked Richard if he would talk to the young man. Tolemy had quite a talent, they said. It would be a shame to let him go.

But Richard knew better than to keep him.

Some men couldn't handle achieving their dreams. Tolemy was one of them.

Even men like Richard, who could handle it, had a difficult time. No one had ever told him that success—real personal success—carried its own stresses.

He'd always thought he'd understood that. After all, he'd bootstrapped himself into one of the richest men in the world. But those successes meant nothing to him. They were side issues on the way to his real goal—finding Apollo 8.

That success had been bittersweet. He'd found the capsule and not the men, and yet he had done what he had set out to do.

Just as he had done with Lovell.

Two successes. Two important successes.

But maybe he was insulated against those successes as he had been insulated against the earlier ones. Maybe he wouldn't have the same problem Tolemy had until he discovered Borman and Anders.

If he could even find Borman and Anders.

The remaining researchers at ACP-S worked the grids that Tolemy had left and found nothing. A few worked outside those grids and found nothing.

They hadn't even found anything that was possible.

Richard was thinking of firing the entire team and installing a new one when he got a personal phone call from the Chinese ambassador to the United States.

"Mr. Johansenn," the man said in perfectly accented English, "we have some information we would like to trade."

His advisors told him to set up the meeting through the United States government, that going around them to the country that former President Rockefeller had once called the most dangerous nation on Earth might get Richard into legal trouble. If he ended up making an unapproved trade with them for secret technology, he might even be charged with espionage.

Richard didn't see China as the most dangerous nation on Earth. They

were merely a larger and politically more repressive nation. He also knew that when the Soviet Union collapsed in 1979, the United States had substituted China for the U.S.S.R. in its foreign policy. The big evil superpower now was China, and nothing Richard or the Chinese did would change that.

He told only his chief of staff that he was going to the embassy in Washington D.C. He decided to meet the ambassador there to prove to his own government (should they inquire) that he had nothing to hide. He could always say, with utter truth, that they had called him; he was just curious enough to go.

The Chinese Embassy looked no different than the other embassies on Embassy Row. They were all stately buildings, with armed guards and formidable security. The only differences were the flags and the uniforms. The Chinese Embassy had its large red flag, that would have seemed festive if Richard hadn't seen so many movies in which the flag had featured menacingly. The guards wore austere greenish uniforms that made him think of robots in early forties movies. They also wore small caps that hid the shape of their skulls, and carried AK-47s over their shoulders in a display of force.

Richard had to go through three levels of security just to get into the building. Even then, he seemed to have acquired three guards all to himself.

He wasn't even carrying a briefcase. There was nowhere to hide weaponry on his person, and besides, they'd searched him enough to find even the smallest bomb.

The interior made him feel as if he'd entered another land. The furniture was ornate and mostly wood, all of it antiques from various dynasties. Expensive vases were filled with cherry blossoms. Tapestries hung on the wall behind the vases.

Richard had been raised with the impoverished—and austere—Soviets as the Evil Empire. He wasn't used to the Chinese mixture of ancient beauty and hidden power within the embassy itself.

He was taken to a third floor reception room, and offered tea and little cakes. He accepted them with a small bow, feeling out of his element. He knew that diplomacy required a detailed understanding of a particular country. He didn't even know if the Chinese had a tea ritual that he might be violating, the way the Japanese did.

He'd been to most countries in the world, but somehow he had missed China.

After a few moments alone with the guards, a door nearly hidden in flowery wallpaper opened. A short man wearing a military-cut jacket over dark blue trousers entered. He nodded at Richard, who stood.

They shook hands. The man introduced himself as the ambassador, and Richard introduced himself as well, just to be polite.

"Forgive my pre-emptive invitation," the ambassador said. "It is just that I know your interest in the Apollo 8 astronauts."

Richard smiled. "The whole world knows of my interest, Ambassador."

"Yes." The man bowed slightly. He folded his hands together. "It is my understanding that your interest supercedes your government's."

"I wouldn't say that," Richard said. "We lost a lot of good men and women going into space. We couldn't afford to rescue them all."

"But these were the first lost in actual space travel, is that not correct? At least in America."

Richard nodded.

"I remember that time," the ambassador said. "I was but a boy. My country rejoiced in the failure of yours, but I asked my father why we celebrated when brave men died. He had no answer."

Richard set his tea cup down. The ambassador hadn't touched his tea or the cakes.

"But you understand now," Richard said.

"I acknowledge the impulse to find joy in another's defeat. I still do not understand why the loss of brave men is a cause for celebration."

The ambassador's language was formal, his face unsmiling, but Richard had a sense that the man was sincere. Richard had to remind himself that a diplomat's job was to seem sincere, even when lying for his government.

But Richard wasn't sure what the ambassador had to lie about.

"I have been instructed to inform your government of our discovery. I am to ask for several things in trade in regards to the whereabouts, things I know your government will not grant. It is a propaganda ploy on the part of my government. They can go to the media in both of our countries, claim criminal disinterest on the part of the United States, and say that your country is unwilling to bargain with the Chinese even when something valuable is at stake."

Richard threaded his hands together, mimicking the ambassador's position. "The location, while a curiosity, isn't of value to my government."

"You and I both know this, and so does my government, but our people do not. The propaganda ploy would work in our favor."

Richard nodded. He could see that.

"I have come to you, *ex parte*, to see if you can make a real and valuable trade to my government for this information. A bit of technology, perhaps, or permission to study the blueprints of one of your larger ships. We would give you the coordinates of the lost astronaut and, should our governments agree, we would send one of our own people with you, to learn with you."

Richard felt unusually warm. His staff had been right and he had been wrong.

"Ambassador," Richard said, "I must clear any such trade through my government."

"They will deny you permission."

"Yes, I know. I'm not even supposed to discuss business with your people. We have no formal trade agreement."

The ambassador nodded. "We can keep this between us."

"We can't," Richard said. "Particularly if one of your people joins us on the mission."

"Perhaps we can drop that point," the ambassador said. "And work through mutual friends."

Mutual friends. Richard had heard of that kind of approach before.

Working with a neutral country that would negotiate the deal on both sides.

"Why weren't you willing to take this to my government?" Richard said. "They could have contacted me."

"Ah," the ambassador said. "But I did. I went to the government first and asked them to contact you, claiming time was of the essence. At first they refused. Then they promised they would take care of things. When I did not hear from you within the week, I called you directly."

A drop of sweat ran down the side of Richard's face. "Whom did you contact?"

The ambassador named names.

"I'll see if they contacted me and somehow I did not get the message."

The ambassador smiled. "There is no need to save face for your government. We do not trust each other. I doubt they contacted you."

"Still," Richard said. "I'd like to check. I'd also like to work through official channels wherever possible."

"Do what you must," the ambassador said. "But we know where your man is now. We cannot guarantee knowledge of where he'll be six months from now. We have no real interest in tracking him."

"I understand," Richard said.

Time was of the essence. The ambassador had not lied.

Of course no one had called any of Richard's companies or had contacted his own personal staff. But then, Richard had only the ambassador's word that the man had even contacted the U.S. government. And while Richard had believed the ambassador about his memories, he was not willing to believe him in business.

Richard had an assistant track down the person whom the embassy had contacted within the U.S. Government. She was able to confirm that the contact had occurred and been ignored. She asked him if he wanted to make an appointment with the State Department Undersecretary who had handled (or at least received) the contact.

"No," Richard said. "Make me an appointment with the President."

The President wouldn't see him. She had pressing business elsewhere, probably aware of the fact that he hadn't contributed as much to her campaign as he had to her predecessor's.

Still, he was the richest man in the country. He couldn't be ignored.

So the next day, he sat in the office of the Secretary of State. The National Security Advisor sat to his left. The head of NASA to his right.

Richard told all three about his meeting with the Chinese ambassador, and after hearing the expected rigmarole about protocol, they got to the heart of the matter.

"I am going to retrieve this astronaut," Richard said. "The question is whether or not I'll do it with your approval."

They had already jostled over the Espionage Act and the Favored Nations Agreements. Richard hadn't budged from his position.

The Secretary of State, a slender woman of Japanese-American descent, pretended sympathy. The National Security Advisor, a tough older

woman with a touch of Margaret Thatcher in her bearing, had already decided Richard was an enemy of the state. And the head of NASA, a thin former astronaut who helped build the Moon Base, was, surprisingly, on Richard's side.

"What can you give them that's not proprietary?" he asked.

Richard shrugged. "They haven't really made a specific request. I figured they would on my next visit."

"You can't give them any space-related technologies," the National Security Advisor said. "And you most certainly can't have one of their people on board your ship."

"Even if they have the specs for that ship?" Richard asked. "What else could they learn?"

"Have you given them the specs for the ship?" she snapped.

Richard turned his chair slightly so that he wouldn't have to look at her. Instead, he focused on the Secretary of State.

"I'm not a diplomat," he said, "but the ambassador seemed sincere when he approached me. He—"

"They always do, Mr. Johansenn. That's their job," the National Security Advisor had a way of sounding extremely condescending.

He ignored her. "The ambassador said he had a memory of the day those astronauts were lost. He seemed intrigued by what I was doing. Maybe they have some astronauts of their own to retrieve?"

"They do," the NASA head said. "They lost several astronauts in the early 1980s, after they acquired the Soviet Union's technology and scientists at bargain rates. But they didn't have the trained astronauts and they lost a lot."

"How come we haven't heard of this?" the Secretary of State said.

"We did," the NASA head said. "It was in reports at the time, but it never hit the media. You know how secretive the Chinese can be."

Suddenly the National Security Advisor was interested. She moved her chair forward. "How many did they lose?"

The NASA head shrugged. "I can get the exact figures for you later. But I'd wager they lost two or three dozen astronauts in those early years."

"Because they wouldn't ask for help." The Secretary of State tapped one long painted fingernail against her lips. "Do you think they're trying something new now?"

"The space race is, for all intents and purposes, over," Richard said. "They can buy their way onto our ships. They lost the Moon to us, and have to cooperate with us to get to Mars. They have their own program, but it's not as advanced as Europe's. Theoretically, China's is only designed for asteroid mining."

"I thought it was for defense," the National Security Advisor said.

"I said theoretically," Richard said. "That's what they claim. But yes, it's for defense."

"Rumors throughout the scientific community say they're planning their own Moon Base. They doubt we can stop them. We're not geared for a war on the Moon," the NASA head said.

Richard nearly sighed, but managed to control himself at the last

minute. "What if what they want is as simple as it sounds? What if they want to see how we're recovering our own people?"

"If they've lost so many," the Secretary of State asked, "how do they know this is one of ours?"

"The suits are different," the NASA chief said. "They'd reflect differently."

"Or," Richard said, "they've already got a recovery program, and they've seen him up close."

"I wonder," the Secretary of State said slowly, a twinkle in her eye, "if they can bring him to us."

Richard argued against it. He wanted to be on the ship that recovered the next astronaut. But he had set the events into motion by being above-board.

When he left the White House, the Secretary of State had already called for a closed-door meeting with the congressional leadership to see if they could have a space-trade agreement with the Chinese, a short-term exchange of information that would allow space scientists to share as much knowledge as possible.

The National Security Advisor loathed the idea; she said the Chinese would get a lot more out of it than the Americans would. But the head of NASA wasn't so sure. His program had stagnated with the rise of private enterprise in space. NASA needed new ideas. Besides, he wanted to know if all the rumors about the various Chinese programs were true.

Richard didn't care about any of that. He had an astronaut to rescue, and he wasn't going to do it from a distance. He left the White House, and went to the Chinese Embassy alone.

The ambassador met him immediately. This time, they went to a more formal room, with red silk wallpaper and delicate carved chairs. No guards stood inside the room, and no one brought tea.

"I had heard you were on Capitol Hill," the ambassador said.

"I saw the Secretary of State," Richard said. "They don't want me talking to you."

"And yet you are here," the ambassador said.

"I realized something while talking to them," Richard said. "I never asked how you knew where our astronaut was."

The ambassador smiled slowly. "They put you up to this."

"Believe me, they did not," Richard said. "If all goes according to their plans, someone will work with you on recovering that body. Only I won't be able to go along."

"And you feel you must go along," the ambassador said.

Richard nodded.

"So we are back where we began."

"Yes," Richard said. "What would you like in trade for the information about where our astronaut is?"

The ambassador smiled slowly. "This information is very important to you."

That was obvious. Richard had lost any negotiating point on that by returning so quickly.

"Yes, it's important," he said, "and time is of the essence."

\* \* \*



It wasn't one of his better negotiations. Usually Richard was a shrewd businessman and a champion negotiator, but he was in new waters here. Not in dealing with the Chinese—he'd dealt with representatives of cultures he didn't entirely understand before—but because he really and truly wanted something.

In the past, he'd always had the ability to walk away.

This time, he could not.

He sold the Chinese government two of his own dart-like ships, the kind he designed after the Lovell mission, along with the specs. He didn't care if the U.S. government came after him for doing so. He had already informed his lawyers that he had chosen not to take the Secretary of State's advice. If the U.S. government wanted to try him under the Espionage Act or fine him for violating various Fair Trade Agreements, fine. He just wanted the time to get to the astronaut and back.

The lawyers had to tie the government up in court.

Then Richard put his P.R. people on the deal. They talked to the media, and suddenly he was the next world-class diplomat, a man who could negotiate with the difficult Chinese and walk away with what he wanted. He broke the story through Helen Dail, promising her another exclusive on his trip to find the second astronaut.

Through it all, he finally understood how Tolemy felt. He hadn't even asked for proof. The great negotiator had missed one of the essential rules of negotiation: he should have made certain the item he desired was what he desired.

If the Chinese were lying—if this wasn't the second astronaut—they were playing him for a fool. They probably thought he was one already. He had given them proprietary technology. If the astronaut—the whatever they had found—wasn't from Apollo 8, they would have won.

From the moment he accepted the agreement, he had a knot in his stomach. He wasn't even looking forward to the trip, and the past two times he had.

On those trips he felt that even failure would be a success: at least he tried.

He didn't feel that way this time. Just scared and a little sick.

His mood colored the entire trip.

He took the same team that he had two years before. The Chinese gave him the coordinates when he was in orbit, knowing that he would inform the U.S. government when he had them. The Chinese were in a sector of space they shouldn't have been in if their technology was designed for asteroid mining or defense.

Something else was going on, something the astronauts on his ship speculated about.

But Richard didn't. He'd felt a little relieved, able to give the U.S. government something in exchange for this mission. He should have been even more relieved. His lawyers informed him that the Chinese had vehicles similar to the dart on their drawing board, meaning they had either gotten his or his competitors' proprietary information through some illegal back channel, but that didn't make him feel better.

He hadn't realized until this mission how truly single-minded he'd been. How great his focus was on these astronauts. It wasn't healthy.

He was no longer even sure it was right.

They were dead. Really and truly dead. There was no rescuing them, and what little he'd learned from Lovell and the capsule hadn't really made up for the effort he'd expended over decades to find them.

He wondered what they would have thought of him, these men who had launched themselves into space on a rocket, protected only by a tin can. Would they have thought he was foolish? Or would they have applauded his audacity?

He used to think they'd understand, but not even he understood any more.

Fifty years was a long time to focus on one thing. Maybe it was time to focus on something else.

They discovered the object not far from the coordinates the Chinese had given him. That was a surprise, given the amount of time it had taken to get here. Clearly, the object was moving very slowly.

The reflection was right; the build was right; the position was familiar. It took Richard one look through the viewscreen and he knew that the Chinese had played fair with him.

He had another Apollo 8 astronaut.

The team cheered, and he cheered with them. He slid into the rescue as if he'd done it a thousand times before instead of just once.

This time, he braced himself properly as he guided the body into the bay. He smiled for Dail's camera—he'd allowed her to suit up and come inside as well—and he carefully moved the frozen astronaut to the back of the bay to a berth designed for him.

McFerson hadn't complained about not operating the grapples. He'd laughed, as if he were having the time of his life. None of them were scared this time. Even if they damaged this corpse, they succeeded. They already had brought one intact astronaut to Earth.

This one was just a bonus.

Richard hated how his thoughts ran. Even as he held the man's arm in his gloved hands, he wasn't thinking of this astronaut as a person, as someone to be rescued, but as an item, as a commodity.

And wasn't that what he'd been? Something to be haggled over, an item for trade? Something that might cause a great loss or a great win?

Certainly not a human being, not any longer.

He tried to keep these feelings to himself—and managed to lose them only briefly, when he learned this one's identity. The name etched along the suit was almost gone, but he could still see its shape, and the first three letters. *B. o. r.*

Borman. The commander.

McFerson speculated about the order of evac, just as Richard had the last time, but Richard wasn't playing that game any longer. Borman was in a part of space that wasn't on Tolemy's map—not in the red section or the green section.

It was as Tolemy had said—impossible to predict where these men would be.

Borman was here, in a place that had no logic at all that Richard could see. And he doubted that anything on Borman's suit would give them real clues about how he got here.

Someone would try to map the trajectory. Someone would make semi-educated guesses, but it wouldn't be Richard.

He was, for all intents and purposes, done.

He didn't say that, of course. In public, he sounded the mantra: they still had one astronaut to find—the junior man on the mission, Bill Anders.

The Anders family got involved. They asked to help in the search. Publicity stunts—the Anders family looking through telescopes, viewing star charts—abounded. Newspapers carried headlines *Family Still Hopes Missing Astronaut Will Come Home*, and the twenty-four-hour news channels did specials. Websites appeared as amateur astronomers tried to figure out, based on all the points that Richard had discovered, where Anders would be.

Richard supported all of this and more. He kept ACP-S running, and he made sure that anyone with information about the last astronaut should feel free to come to him. He kept the best minds in the business searching, and he even tried to get Tolemy out of retirement.

But Tolemy's heart wasn't in it, and neither was Richard's. Something had changed for him at the last. Maybe he was afraid of success too—or afraid to complete the project. Maybe all that self-examination was just a way to prevent himself from finishing the job.

Because, if he found Bill Anders, what else would drive him? The entire crew of Apollo 8 would be home. The capsule was already here and on display in the Smithsonian, with his private company credited for the donation. Children climbed in and out of the couches where, essentially, three men had died.

After a few years, he stopped monitoring the program. He actually got what most people called a real life. He married, for the first time, to a woman half his age, a woman who could keep up with him in conversation. They had three children—a daughter and twin boys—and while he found fatherhood interesting, it was not all-consuming the way most people claimed it would be.

His wife said that was because he was not most people. Others he mentioned this to told him it was because he had nannies and assistants who took some of the burden off the childrearing.

But that wasn't what he meant. He had expected raising children to be as focused an activity as searching for Apollo 8 had been. He expected to think about them each waking minute, get lost in their smallest deeds, praise their greatest accomplishments.

And while he paid attention, he did not think about them every waking minute. He barely thought of them at all. Once he learned who they were—how their personalities were forming—he treated them as he treated most people, with a casual coolness that he couldn't quite help.

His wife claimed she expected it, but he could see disappointment in

her eyes. His children always sought his approval for everything they did, and yet when he praised them, it wasn't enough.

"They don't want your approval," his wife finally told him. "They want your love."

He thought about that. He wondered if he had ever loved anything. Really loved it.

And eventually he came to the realization that he loved the dream of space. The dream that he had absorbed as a child—the one painted in the picture in his office—of possibilities and fears and greatness unknown.

That had been what he'd been pursuing with Apollo 8. Not a rescue, so much as a hope. A hope that the universe out there would be different than the world in here.

The realization calmed him, and he went back to work, much to his family's dismay. Once again, he checked on ACP-S, not because he had any hopes of finding Anders—he didn't, not really—but because that was part of what he did in the same way that he checked on all of his various projects the world over.

He grew older and he watched as the dreams of his youth—the dream of space flight and far-ranging exploration, of colonizing the solar system, and humankind moving beyond the confines of Earth—slowly came true.

He marveled at the way things went, and he was proud of his part in them.

#### **Part Four: 2068**

Which was how he came to be on the starliner *Martian Princess* on its maiden voyage from the Moon to the newly opened Mars colony. The colony had existed on Mars for nearly thirty years, but it had expanded and now had a small resort for adventurous travelers who wanted to inspect the area before they bought homes in Mars's second colony, which was under construction.

Richard had a stake in both colonies. He owned the resort. And he owned the *Martian Princess*. The starliners made him proud—not because they were passenger ships like the old luxury liners that used to cross the ocean—but because they were really fast. And that ever-increasing speed was pulling in the outer system with each increase, making things seem closer, more possible.

People still had to commit upward of three months of their life to the journey, depending on where Mars was in relationship to Earth, but that was nothing like the years for a there-and-back journey in the 2030s.

He had the V.I.P. cabin near the front of the ship, but he made a point of visiting all the decks, being seen in the restaurants and the shops and even in the educational wing, where he conspicuously took lessons in Mandarin.

He moved slowly now. Even with all the advancements in medical science, his life had taken its toll on his health. He was 108 and frail. He had to be careful of his old bones. His daughter Delia, who was also on the

trip, insisted on bringing a retinue of doctors in case Richard fell ill or tripped and hit his head.

If he had known that the girl was going to be this protective, he never would have made her head of most of his companies. He would have stuck with assistants. Although no assistant had half the intelligence and drive that his daughter had. At forty-two she reminded him of himself at the same age—focused, edgy, and successful in spite of herself.

The resorts were more her dreams than his. She could see past the solar system. She wanted to get to a time when human beings traveled the galaxy the way that they now traveled around the Earth.

That was a bit far for him. Even Mars seemed far for him. This would be his first trip to the red planet, even though he'd had property there for decades. He'd never wanted to commit to the trip.

He wasn't sure what had made him commit this time, either.

He suspected it had a lot to do with the conversation he'd had with his sons, when he told them they needed to be adventurers. They didn't understand him, and he realized that they hadn't seen him in his adventurous years—going through astronaut training, all that risky travel into orbit and beyond, his rescues of Apollo 8 and the two crew members.

His boys knew of that, of course—this was all part of their father's lore—but they hadn't seen it. And they were their mother's children. While bright, they didn't understand what they couldn't see.

They weren't dreamers the way his daughter was. They did strive, though, and they handled themselves well, unlike many children of the rich. They started charities with his excessive fortune, and were working to change the Earth, something he had never even thought of.

He had a hunch they did it as a rebuke to him, but he was proud of them for it. They had seen a gap and filled it, and while they weren't quite what he'd expected, they were good men with good hearts—a tribute to the woman who had raised them.

Certainly not a tribute to him. When he realized how limited they were, he focused on his daughter. She was his child 100 percent, and that fascinated him. She reflected his good and bad qualities—his single-mindedness, his coldness, and his casual way of coming up with a viable idea that somehow made millions.

Yet she was dedicated to him, more dedicated than he had been to his own parents in their declining years. He wasn't sure if that was socialization, a difference in the culture, or if she had a slightly softer side than he had.

He wasn't going to figure that out, either. He was going to enjoy it, as he enjoyed her company when she gave it.

Mostly she spent the trip in her two cabins—the other V.I.P. suite, and the secondary suite she'd commandeered to keep the corporations running. She ran from place to place, as he used to do, frustrated by the slowness of interplanetary communications, and worried that she was going to miss something by being so far away.

He tried to tell her that sometimes being far away was exactly what an entrepreneur needed, but she'd looked at him as if he'd insulted her intelligence, and he vowed at that moment to stop giving advice.

Instead, he retired to his own cabin, which he loved.

He'd always insisted on luxury. The luxury suites on the *Martian Princess* were spectacular, but the V.I.P. suites took that luxury one step farther. He had his own living room, a dining room, and two bedrooms on the second story—not that he needed both—one of which he turned into an office. The bathroom had every luxury, and the functioning kitchen could cook some foods itself.

But what he loved the most was what the brochures called the backyard—the deck outside the cabin with a floor-to-ceiling view into space. The material that the windows were made out of was so clear that it looked to Richard the way space had looked through the open door of the cargo bay on the dart.

Someone had furnished the yard like a formal living room. When he examined the suite the week before the *Martian Princess* left, he had the formal furniture replaced with chaise lounges and wooden tables—the lawn furniture of his youth. The lights, scattered around the yard, looked like tiki torches. All that he needed was some green grass and some fireflies, and he would be at home.

He spent most of his time on the deck, reading or listening to music. He didn't watch any programming or have holo performances on the yard because he didn't want to get lost in them. He never invited anyone into his cabin. If he saw people, he saw them on the decks or in the restaurants.

The view was enough.

And it was the view that caught him, two days out from Mars. He was standing in the middle of the lawn, transfixed by the way the darkness of space wasn't really dark. There were hints of light in it. Sunlight went everywhere. The all-powerful star that was the center of this solar system had a greater reach than any human being ever could.

He tilted his head up, and saw a reflection in the distance, a flash of light off something white ahead of the ship. He blinked, certain he'd imagined that. But it came again, larger now, as if the object were spinning ever so slowly.

He went to the cabin, used the on-deck telescope for his particular suite, and turned the exterior lens on the object.

The very powerful telescope had an automatic computer tracking function and he set it on the object.

His breath caught when he looked.

An astronaut in an old-fashioned suit.

His heart started to pound.

Anders. Could it be?

Richard wiped his hands on his pants, thought for a moment, and knew how everyone would react. They didn't treat him like a doddering old man—that kind of treatment disappeared as aging became a way of life for so many people—but a person who had passed one hundred still had achieved a milestone that made the younger generations dismiss him.

He wasn't in his prime any more, physically—that was obvious—and so many people thought that meant he wasn't in his prime mentally, either.

The ship would be past the object in less than a minute. He had to act, and act quickly.

His hand shook as he pressed the comm link. "Delia," he said to his daughter, "come here, please. Now. Quickly!"

Then he called the bridge. "I need your best pilot, with a few changes of clothes, to meet me in ten minutes."

"May I ask why, sir?" the Captain asked.

"No."

Richard shut down the comm link, then grabbed some of his own clothes, stuffed them inside a bag, and put the bag over his shoulder.

The door to his room glided open and his daughter entered, looking worried. She was trim and athletic with her mother's dark hair and eyes.

"I want you to see something," he said before she could speak.

He indicated the telescope. "Look quickly. It's more than likely almost out of sight."

She started to object and he held up his hand. "Quickly."

She sighed and walked over. She wrapped one hand around the viewer, and peered through the lens, then gasped. "This has to be some kind of joke."

"Possibly," he said. "But I'm still going after it, joke or not."

He knew that the liner couldn't just turn like a ship in the ocean. This ship was turning around only after it reached Mars orbit. And by the time they got there, Anders would be again lost.

The last astronaut. The last part of Richard's dream.

He had just passed it.

But he had no intention of losing it.

"Dad, what are you thinking?" Delia asked as she walked with him from his suite and headed down the hall.

"I'm going to go get him."

Delia looked at him as if he had suddenly lost his mind. "Daddy, there isn't any way to pick him up. We're already far, far past him."

"Not that far," he said. "I'll take one of the lifeboats. It's designed with more than enough range."

He'd insisted on the old-fashioned term when he'd approved the design of the starliner. He worried that such a large, grand ship would suffer the fate of the *Titanic*—that some sort of disaster would hit it, and hundreds of people would die because he hadn't prepared. He'd insisted on smaller ships, most of them two-man crew sized, a few a bit larger, all of them with enough power and supplies to last a year with a dozen people on board.

"They don't have grapplers," she said.

Richard gave her a surprised look.

"I studied your space rescues, Dad," she said. "They were miracles of efficiency."

They hadn't seemed like it at the time.

"I don't need a grapppler," he said. "I need a lifeboat, a spacesuit, and a pilot."

"Daddy," Delia said, "this is crazy."

He ran a hand along her face, then smiled at her with the most affection he'd ever felt.

"Yes," he said, "it is."



\* \* \*

The pilot was a small woman named Star. He thought the name a good omen. Before she was hired as a tertiary co-pilot for this mission, she'd been with the U.S. military, flying orbital defense missions around the Moon colony. He looked up her record, saw the reprimands in the file for a bit too much cockiness, for a tad too much recklessness, and decided she was exactly what he'd needed.

He could have flown the ship himself—the controls were so simple that a child could fly it (he'd insisted on that, too)—but he chose not to. He needed the help.

The lifeboat didn't have a cargo bay like the ones he was used to—no separate environmental system, no real storage area—but it did have two doors, one inside, and one with an airlock out the side. That was all he needed. And it had six small cabins. He could put Anders in one and shut off the environmental systems to that cabin to keep him frozen.

"I'm going with you," Delia said as they reached the lifeboat entrance. Star had already gone on board and had the ship coming to life.

"No," he said. "You have to pull every string you can pull to get back here and pick me up, with a ship equipped to handle what I'm going to go get, and then get us all back to Earth."

He then kissed her on the forehead and stepped aboard, closing the hatch behind him.

Star got the lifeboat slowed to a stop within six hours, and had them back to the area of Anders' position in another eight hours. The entire time Richard sat in the copilot's chair and stared ahead into the emptiness of space. And every hour he had to calm Delia, tell her he was fine. He had no idea his daughter worried so much. That made him feel wanted, and he liked that feeling.

The old ships that Richard had used on the first three missions never had this kind of speed or maneuverability. In fact, at the speed the liner was moving when they'd left it, the old ships wouldn't have even had the power to slow and stop, let alone go back.

It took surprisingly little searching to find Anders. The newer equipment on the ships also made that easier.

Star matched Anders' course and pulled in close beside him. The body was barely turning. It seemed to just float there.

"You take the controls," Star said, "and I'll get him."

"No," Richard said. "I will."

She gave him a sideways look.

"I'll be all right," he said.

It took him a little longer to climb into the new space suits. They looked more like a white tuxedo than an actual space suit, and the helmets were close-fitting and light. Everyone on the liner had been trained to put them on, but they still didn't feel right, as if he weren't wearing enough to protect him from the cold he was about to step into.

He climbed into the airlock and magnetized his boots. Then he vented the atmosphere.

He felt stronger than he had in years.

The tricky part, he knew, would be reaching for Anders. Star had got-

ten the lifeboat to a point where it nearly touched the man, but Richard had little to support him. He used the tether inside the airlock, and wrapped it around his waist, securing it tightly.

Then he opened the outer door.

Unfiltered light hit him, reflecting off the lifeboat's silver sides. He blinked in the glare.

Then his eyes adjusted.

Anders floated near him, just an arm's reach away.

Looking free. Almost as if he didn't want to be rescued.

For the first time, Richard understood the impulse that had led to the Apollo 8 astronauts evacuating their small ship. Why stay inside a tin can when the entire universe waited? What would Anders have said if he knew that his body would be found so very close to Mars? How would he have felt to know that he had spent a hundred years gazing blindly on the entire solar system?

Richard reached forward and grabbed Anders' cold, stiff arm.

It would be so easy to lock elbows and step into the darkness.

It would be so easy to chose this death. Eventually, he would just go to sleep. He would be unencumbered by anything, gazing at the vastness of space and of the future.

Yet he had no reason to step out. He still had years yet. Years of adventures.

He was going to Mars where he already had businesses. He had been traveling on a starliner, for heaven's sake, something that the original Apollo astronauts could only dream of.

Their sacrifices had brought him here.

Their courage, their loss, their dreams.

He had an obligation to keep living the future they'd always wanted, to continue to make their dreams of the stars even more possible for succeeding generations.

Part of that was bringing Anders in, letting scientists see what happened one hundred years out. To learn, as they had from Borman and Lovell, about the adventures these men had had, even after death.

"You okay?" Star asked.

"Fine," Richard said.

It took only a gentle tug to bring Anders to the door. Richard wrapped his arms around the hundred-year-old adventurer and pulled him gently so that his booted feet didn't hit the door's lip. Then Richard eased the body inside.

As he reached for the mechanism to close the outer door, he saw the vastness of the stars, as mysterious as the Moon used to be when Richard was a boy.

All his life, people accused him of pursuing death.

But he hadn't been. He'd been exploring possibilities, reaching toward a future he could only see in his imagination.

He'd gone after these men because they'd inspired him. But he'd never rescued them.

They were the ones who had been the heroes.

They were the ones who had always—always—rescued him. ○

## ALICE THROUGH THE MAGNIFYING GLASS

**B**y now you will certainly have heard of the book I intend to discuss here: *James Tiptree, Jr.: The Double Life of Alice B. Sheldon* (St. Martin's Press, hardcover, \$27.95, 469 pages, ISBN 0-312-20385-3), a major biography of one of our field's outstanding (I almost said "seminal") writers, by critic Julie Phillips. It's been reviewed in any number of genre venues, but also in a surprising number of mainstream locations, arguably culminating in its front-page prominence in *The New York Times Book Review* one Sunday in August 2006.

Given such extensive and well-deserved coverage, the book has, you may tend to believe, disclosed all its many virtues. But after enjoying this meticulous, invigorating, hypnotic, even shattering study of an incredible life, I find there are still a few angles to it that I have not yet seen covered.

So what I'd like to do is, first, talk about the technical accomplishments of the biography, the fineness of the writing, organization, and analyses. Then, I'd like to highlight one oversight, and a misstep: an imbalance that Phillips ultimately recovers from, but which still impacts our reading of the book, and our take on Tiptree's life and career. This talk will flow into a discussion of the meaning of Tiptree's life, now that we understand it better and in more detail—how I think it stands in relation to the lives of other creators, both mainstream and genre.

And although it's tempting to re-

count the many bombshell or miniaturist revelations that Julie Phillips has laboriously compiled, with years of detective work, I will resist the temptation, leaving the first-hand enjoyment of those titillating tidbits to your perusal of the actual text.

Suffice it to say that all of the well-known legends and anecdotes that accrued to Tiptree during his/her most intense period of activity in our field are merely the tip of a large iceberg, a glacial mass formerly nine-tenths submerged that is now fully mapped by Phillips. If you thought you knew all there was to know about Tiptree/Sheldon, you were absolutely wrong. All of us—even Tiptree's closest correspondents, of whom I was certainly not one—were, prior to the publication of this book, in possession of a portrait that was barely sketched in. This book will educate, shock, entertain, illuminate, console, and disturb you—but it's irreducible: there is no substitute for the text itself, no handy Cliff's Notes version.

We often speak of certain biographies as being as compelling as a novel. I'm afraid I'm going to have to employ that cliché here. Julie Phillips has the gifts of a natural-born storyteller, building suspense and tension, patterning her story in mythic ways that do not conflict with the facts, but rather enhance them.

Not only does she establish Tiptree's various physical and cultural milieus with vivid economy—the African wilderness; the Chicago so-

cial scene; Californian bohemia; CIA-land, and so forth throughout Tiptree's life—but she conjures up the players in the Tiptree mythos with brilliant strokes that make them truly come alive. We first encounter these qualities in Phillips's writing as she deftly introduces Tiptree's parents, Mary Hastings and Herbert Bradley. Limning them boldly within just the first few pages of Chapter 1, Phillips sets a solid foundation for the lifelong elaboration of their natures that will follow. (Of course, Mary, being more pivotal in her daughter's life, comes across more deeply than Herbert, who was something of an essential cipher in Tiptree's life.) Phillips has a knack for categorizing behaviors in elegantly insightful ways: "The price for being swept up in Mary's charm was to leave something of yourself behind." Such *aperçus* liberally stud the text, providing instant identification and empathy with the subjects.

Phillips's prose, as exemplified minimally above, is nicely crafted on a sentence-by-sentence level. The rhythms of her writing are varied and propulsive, responding to and mirroring the various crises and lulls in Tiptree's life and career. Moreover, she manages to maintain an objective, journalistic tone without falling into a droning pedantry. Now and again, as relief, she'll insert a lightly veiled personal opinion ("Alice had the bad luck to be pretty") or bit of humor. ("She gave Major, the red macaw [that was Tiptree's pet], to the Brookfield Zoo,

where he was inspired to lay an egg, and so turned out to have gender troubles of his own.")

Phillips's chapter organization is logical and compelling, determined by various undeniable stages of Tiptree's life. But a strict forward-marching chronological flow and division is complemented by foreshadowing and retroactive allusions. For instance, Phillips is not afraid to illuminate Tiptree's schoolgirl years by reference to the mature story "Painwise," still in Alice's future. And the childhood incident of young Alice Bradley fashioning a grass hideaway for herself on the African savannah becomes a psychological and symbolical motif that is referenced to explain much of Tiptree's adult behavior. And the larger structure of the book is commanding as well.

The Tiptree that our field knows best does not appear on the page until halfway through the text, with Chapter 24, "The Birth of A Writer (1967)." By this time Tiptree was fifty-two years old, with another twenty years to live. Should coverage of her career have thus begun categorically about two-thirds of the way through, rather than midway? Not at all. The first half of the book is packed with all the necessary characterization of and insight into the woman behind the pen name, which we need to have in order to understand how Tiptree the SF writer was born, how and why the famous pseudonym and charade was necessary to

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Tiptree's mental health and artistic development. And the twenty years of Tiptree's late-blooming career were arguably an equally weighty counterbalance to the five decades that had been her lot up till then, some kind of obscure culmination and Pyrrhic victory. The bipartite division of this tale, this life, is a brilliant objective correlative to Tiptree's bipartite lifestyle and personality itself.

What of Phillips's scholarship? Insofar as I can tell, it's impeccable. Over sixty pages of bibliographies, end-notes, and index buttress all her reportage. Moreover, she does not indulge in the main sin of many modern biographers: fanciful recreation of events and dialogue not recorded. Only once that I noticed does Phillips conjecture, in regard to young Alice's acquaintance with a certain book: "By now she must have read *The Well of Loneliness* . . ." Well, maybe yes, maybe no. But it's a mild, supportable guess, and the only such case.

Additionally, in an area I can personally test, Phillips's work is validated. I refer to her portrait of science fiction, fandom, and various amateur and professional personalities therein. Her descriptions of many famous figures—Silverberg, Ellison, Le Guin, Malzberg—rings true, as do her accounts of the contemporary impact Tiptree and his work had on the field. Here she exhibits an admirable evenhandedness, clarity of vision, and faithfulness to reality, providing a picture of our genre that will intrigue mundanes as well as the faithful.

Finally, Phillips's analyses of Tiptree's stories are consistently insightful without overelaborating their subtexts to death. Her light but sufficient touch leaves the stories unwounded, just as rich for future readings and re-readings as when they were first published.

What of that lacuna and misstep I mentioned earlier?

The only really significant omission in the book is the relative lack of weight Phillips gives to Tiptree's race, wealth, and social class. True, she does portray the younger Alice as the pampered debutante she was. But in terms of how the specific privileges of her birth allowed Tiptree's neuroses to flourish, and perhaps inculcated them in the first place, Phillips is rather silent. (Even the very existence of the vast and unusual amount of documentation of Tiptree's life available to Phillips stems from the exclusive circles into which Alice Sheldon was born.)

It seems to me that a cabin in Yucatan and a lodge in Wisconsin, among other perks, were necessary prerequisites for the exfoliation of Tiptree's odd and extravagant personality, in a way that, say, having to support oneself scrubbing toilets would have precluded. I hesitate to call Tiptree a "drama queen," since she was so often stoic and silent in her suffering, but perhaps you'll take my meaning if I say that had Tiptree been born equally talented, but black and poor, or even white and lower middle-class, it's hard to imagine she could have afforded such self-indulgence and often morbid introspection as she exhibited and was permitted. And although such counterfactual speculations are really beyond the pale of a biography, still it would have been nice to see more acknowledgment of the role Tiptree's above-average economic freedom played in allowing her character to become so involuted.

The more troubling or problematical issue I have with Phillips's book relates to the larger question of how we can best classify the source of Tiptree's lifelong angst, anomie, and

unease, the engine that fueled her scattered aspirations, her writings and, ultimately, her death.

Was it sheerly down, or even ponderantly, to her gender, or was it due to something else, such as misanthropy and existential nausea and perfectionism? Or was it a conflation of all of the above tendencies and forces?

There is no denying that the major hook for this book, the aspect that has garnered the most attention and publicity, is Tiptree's split gender identity, the way her inborn instincts and libido were channeled by the (possibly repressive) culture. It's the most salacious, scandalous, juicy aspect of the story, and the main lens through which Phillips examines her subject. But is it a distorting lens?

Now, certainly we have to acknowledge at the outset that everything Phillips maintains about Tiptree's sexual confusion and how it affected her agonized life is true and accurate. Tiptree's own comments, both private

and public, bear out Phillips's thesis about the centrality of this issue. Nor does Phillips indulge in excessive feminist polemics or tendentious slanting of events. Once in a while, she'll overstep neutrality, as with the quote cited above, about natural beauty being a misfortune. (If so, it's a strange misfortune that millions strive to acquire artificially.) Or when Phillips says of Tiptree's short career as a visual artist, "Like many women, she painted herself," implying that self-portraiture is somehow an exclusively insightful feminine mode—tell that to Rembrandt.

But what is central is not necessarily the whole story. The Sun is central to the Earth's orbit, and provides vital light and heat. But we breathe an atmosphere as well, and touch the soil, and see the horizon, and sometimes forget the Sun is even shining.

To assign Tiptree's fate and mature condition predominantly to her gender problems, to view the whole course of her existence from child explorer in Africa to elderly woman

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with the weapon of her suicide in hand strictly through this template, is to argue that biology is destiny. Such a thesis undercuts Tiptree's universality and relevance and relatability. It makes her a one-sided freak who can never serve as a model or inspiration for the broad majority of readers.

It also seems to me that to simply point to female counterexamples from Tiptree's own generation or adjacent generation, who, whatever their sexual identity, managed to negotiate the male-dominated culture more capably (thanks, admittedly, to better brain chemistry) is sufficient to prove that there was more holding Tiptree back than simple non-acceptance from the straights, or active sociopolitical roadblocks from outside herself. I would cite the careers of Carol Emshwiller (born 1921) and Kit Reed (born 1932) as germane to a rendering of how it would have been possible for Tiptree to carve an alternate path for herself, had she not been her own worst enemy.

Now, as I said earlier, Phillips, by book's end, ultimately recovers from this alluring temptation to stuff Tiptree into a straitjacket of bisexual confusion. She identifies and examines several other forces and influences and tendencies in Tiptree's life and mentality that also had a hand in shaping her, from her domineering mother to a suppressed kind of masochism. By page 279, a nearly sixty-year-old Tiptree is quoted as perceiving her own deepest problem as being simply and inescapably "that obscene joke known as [being] alive and conscious." That's an existential malaise that lifts Tiptree into new territory.

Now, unshackled from gender dysphoria, we can begin fruitfully to associate her at various points of inter-

section with a host of other familiar beloved freaks from within and without our genre. Like H.P. Lovecraft (and note Tiptree's desire, as with HPL, to attain a sexless avuncular state: "Uncle Tip" indeed!), Tiptree experienced a kind of cosmic horror at the fundamental workings of the universe. Like Robert E. Howard, she let apronstrings bind her to the point of despair. Like J.G. Ballard, she witnessed brutalities in her childhood that warped her understanding of—or perhaps peeled away the façade from—the worst side of human nature. Like Jerzy Koszinski, she experienced a traumatic childhood that led to a need to fabulate about her biography and indulge in less-conventional sex. Like Michel Houellebecq, she was often prone to reduce literary or theoretical sex to its animalistic, Darwinian components. Yet like Theodore Sturgeon (another parent-damaged figure), she constantly sought love and connection in her life and fictions.

I hope my point has come across in this rambling dissent from the consensus interpretation of Tiptree's life as dominated by her gender problems. Tiptree is too universal and valuable a figure, her legacy too important, to fall into the trap of consigning her to a single category, even if that category was, by her own admission, crucial to her development and self-perception.

And, luckily, Phillips's skill and insights, her accomplishments here, are ultimately of such high quality and discernment that, with a little additional skepticism on the reader's part, Tiptree emerges as a figure irreducibly allied with us all.

As the female impersonator Ru Paul is fond of saying, in stressing our commonality, "We're born naked, and the rest is drag." ○



**JAMES TIPTREE, JR.**  
**The Double Life of Alice Sheldon**  
by Julie Phillips  
St. Martin's, \$27.95 (hc)  
ISBN: 0-312-20385-3

**T**he cliché that most writers live uninteresting lives is largely accurate. After all, how much excitement is there in sitting alone, turning blank paper (or a blank screen) into copy? As Robert A. Heinlein is supposed to have observed, the high point of the day for most writers is opening the mailbox; the low point usually comes immediately thereafter. Superficially, then, a writer's biography shouldn't be a promising subject for a book. But here, as in so many ways, Tiptree is an exception.

Most readers probably know that James Tiptree, Jr., made his SF debut in 1968, quickly making a splash as a writer to watch. Nebula and Hugo awards eventually vindicated that promise. At around the same time, Tiptree began a correspondence with many of the important writers of the time—Ursula K. Le Guin, Harlan Ellison, Joanna Russ, Harry Harrison, and a number of others. The letters built the picture of an exciting life: African safaris, fishing expeditions, service in World War II, hints of a postwar job with one of the spy agencies—and of a witty, erudite person with whom it was easy to talk about almost any subject.

But there was a mystery about "Tip." The writer conducted all his business through a PO Box, never visited editors or agents, and was unknown on the convention circuit. No one had even spoken to the writer on

the phone. The letters would plead work or travel as a reason for remaining aloof from the social world of SF. Fans and fellow writers built up their own theories; even so, it was a huge surprise to most of the SF world when, in 1976, James Tiptree, Jr., turned out to be a middle-aged Virginia housewife named Alice Sheldon. She was not one, but two award-winning authors, having also published as "Raccoona Sheldon."

Now Julie Phillips has given us a look at the person who became Tiptree. It turns out to be a great story—not only because Alice Bradley Sheldon (1915-87) actually had lived the exciting life Tiptree constantly alluded to, but because of the insight it provides into a writer who did as much as anyone to raise the standards of the field in one of its most creative periods. With access to the author's private papers, to her voluminous correspondence, and the reminiscences of those who knew the writer, both in her mundane life and in her identify as Tiptree, Phillips has given us as full a portrait as we're likely to get of Tiptree/Sheldon.

Alice Sheldon was brought up in a home where creativity was valued: her mother, Mary Hastings Bradley, was a popular writer in the twenties and thirties, and for a long time it looked as if Alice was going to make a career as a painter or an illustrator. She had been reading SF for at least twenty years before she started writing it, so she was far more familiar with the language and tropes of the field than many beginners. And she had spent enough time in the "real world"—the Women's Army Corps in

World War II, a New Jersey chicken farm in the late forties, the CIA from 1952 to 1955—to have serious concerns to bring to her fiction. (Her husband “Ting” remained in a high position with the CIA until his retirement in 1970.) And, of course, it’s a mug’s game to try to find the roots of genius in the details of biography.

Phillips spends a fair amount of time on the issues raised by Sheldon’s gender masquerade, which not coincidentally took place just as feminist issues and women writers were beginning to make their presence felt in SF. Tiptree got credit for sensitivity when Sheldon’s letters and stories showed real awareness of the issues facing women. As her writing career grew, though she lived under considerable strain as her mother and her husband (and she herself) underwent health problems. That strain manifested itself in depression that heavy doses of self-medication did little, ultimately, to allay. (She had been a sporadic amphetamine abuser at least as early as her army days.)

Many people know that Alice Sheldon committed suicide; Phillips sets the scene and supplies some previously unknown details. In the early morning on May 19, 1987 Sheldon took one of her pistols (she had been an avid hunter and sharpshooter since her teen years) and shot her husband Ting, now blind and in failing health, as he lay sleeping. She called her lawyer, then shot herself. The police found her in bed with Ting, holding his hand. The event shocked, but did not entirely surprise, those who had been receiving her sporadic hints at self-destruction over the years.

While Tiptree’s ultimate monument is her published work, Julie Phillips’s biography stands as a significant door to understanding the person who created that work. If for some reason you haven’t yet read

Tiptree, here’s a good excuse to catch up. While she wrote two novels, she made her real impact with short fiction. *Her Smoke Rose Up Forever* (Tachyon Books) is one good collection, including such classics as “Houston, Houston, Do You Read?” and “The Women Men Don’t See.” Read Tiptree’s stories; then read this wonderful biography—one of the very best on any figure in the field.

## THE PRIVILEGE OF THE SWORD

by Ellen Kushner

Bantam, \$14.00 (tp)

ISBN: 0-553-38268-6

Ellen Kushner has mapped out a distinctive personal territory that isn’t quite fantasy—at least, if you believe that genre has to have some element of the magical or supernatural in it. The world of *Swordpoint*, in which this new novel is based, is one in which decayed noble houses, ancient buildings, and a very active class structure are at work—very much like the settings of many swashbuckling adventure stories. The book has all the feel of fantasy, even without magic. A reader can easily believe that magic is lurking somewhere around the next corner of the nameless city in which the stories are set.

The social life of the city is divided between a marriage market, in which respectable young ladies are introduced to the eligible young men of an appropriate class, and a brawling demimonde that flouts all the pretensions of upper-class society. Naturally, many powerful men spend time in both halves of this Jekyll-and-Hyde world. A class of professional swordfighters has arisen to deal with the contradictions that sometimes arise from the coexistence of these two worlds within one city.

Kushner’s twist in this novel is an inversion of a traditional Regency romance plot: A young country girl

of good family, Katherine Talbert, is introduced to the social whirl of the city—not in the expected role as a debutante, but as a swordsman in training. This social aberration is engineered by her uncle, the Mad Duke Tremontaine, whose wealth and position allow him to flout all rules. As the story progresses, we watch Katherine at first rebel against her odd fate, then find satisfaction in her training, and finally take on the cause of a wronged young woman—one from the set that her own social status would have made her a member of—and right it by her swordplay.

But the city is a dangerous place, and the Mad Duke has enemies. Despite Katherine's growing skill, the Duke himself must cut through the complications before everything is sorted out. As with Kushner's earlier books, the story refuses to stick to any one genre: the reader who pays attention will find herself reading at one point a swashbuckler, at another a romance, and at almost every point, a comedy of manners.

Kushner's long-awaited return to the world of *Swordspoint* will please the many fans of that novel, especially since it involves the return of several of the characters of that book. Her novel *The Fall of the Kings*, in collaboration with Delia Sherman, also took place in the city. But *Privilege of the Sword* definitely stands on its own feet, so there's no need to hunt down the earlier books other than to enjoy them for their own sake.

## THE DEMON AND THE CITY

by Liz Williams

Night Shade Books, \$24.95 (hc)

ISBN: 1-56780-045-7

Another writer working to expand fantasy beyond the elves-and-dragons model is Liz Williams. This book, the second in a series, is a deliciously humorous detective story set in a universe ruled by the gods of Chi-

nese mythology. As with all good fantasy, the mythology is basic to the story; in fact, one of the major characters is Zhu Irzh, a demon from the Chinese hell, on loan as a vice detective to the police force of Singapore 3.

As this book begins, Zhu Irzh investigates the murder of a young woman in a bad section of town. The victim was a valued employee of one of Singapore's wealthiest businesses, Paugeng Enterprises, owned by the rich (and very beautiful) Jah Tersai. At the same time, the book picks up the story of another Paugeng employee: Robin Yuan, who turns out to have been the victim's lover.

Zhu Irzh is, predictably, a rough customer, unfettered by conventional morality. And with his human partner, Detective Inspector Chen, on vacation, Irzh has fewer constraints on him than usual. So it isn't particularly surprising when he finds himself sexually entangled with one of the chief suspects in the case. This in spite of the fact that he is not normally attracted to human women. . . .

Meanwhile, Robin, the murder victim's former lover, has become involved in a different way, with an experimental subject to whom she has been assigned. The subject appears to be a humanoid male, but his exact nature is at first uncertain; possibly he is a demon, and may have information concerning a significant threat to the humans of Singapore by the denizens of whatever Hell he has come from. After all, that is the normal business of demons—given occasional exceptions such as Irzh. So when the subject escapes, both Robin's job and the safety of the entire city are apparently at risk.

In the course of the plot, Williams uses the framework of Chinese mythology—mixed in with several other Asian mythological flavors, all highly exotic to most westerners—as a springboard for elaborate games of

allusion and culture clash. For example, the demon detective Irzh comes across as a slightly skewed version of a stock hardboiled character—jaded, cynical, corrupt in small ways. But every now and then, his demonic nature flashes through—usually with comic effect.

Dark, irreverent, edgy, and unpredictable—if you like fiction that refuses to be tucked into neat pigeonholes, run out and find this one.

## EARTH ABIDES

by George R. Stewart

Del Rey, \$13.95 (tp)

ISBN: 0-345-48713-3

Here's the latest in Del Rey's strong program of reissued classics. Like Edgar Pangborn's *Davy*, *Earth Abides* falls in the broad subgenre of post-catastrophe SF—books in which the human race has suffered near-extinction, with the survivors trying to rebuild civilization from scratch.

First published in 1948, *Earth Abides* postulates a flu-like plague that kills off the human race. The protagonist Ish, a geology student out on a field trip, apparently gains some immunity from the disease by being bitten by a rattlesnake. When he recovers from the immediate reaction, he travels home to San Francisco. But long before he arrives, he has learned that all but a handful of his fellow humans are dead.

He finds his parents' deserted home and moves in. The electricity and plumbing still work, and he scavenges canned food from grocery stores. After a while, he finds a working car and takes off cross-country. He touches base with isolated groups of survivors, and recognizes that many don't have the will to face their new reality. Others are starting to cope, but don't need another mouth to feed; so Ish moves on. Already he sees signs of nature taking back its own.

He returns to San Francisco, where

he eventually begins to connect up with other survivors—in particular Emma, a woman who becomes his life partner and bears his children. (We find out later that she is Black—a fact neither Ish nor Stewart makes any great issue of.) Stewart follows them over the years, as they begin to build a community, still scavenging from the built-up stores of the now-dead civilization. Finally, when the power and water supply begin to fail, the survivors have to switch to a new mode of existence.

Stewart's characters have no special powers, none of the Robinson Crusoe survival skills or technical expertise we have seen in so many other stories. That, in a sense, is part of the charm of the book. Ish survives not because he is special, but because he is lucky, and because the structure of his civilization—that of the late 1940s, remember—is robust enough to keep him and his friends supplied with the basics of life. One wonders how well the more sophisticated infrastructure of today would last if its handlers and mechanics were no longer on hand to tend it.

The author shares more of the social assumptions of his time than he probably realized, especially concerning gender roles. (On the other hand, the interracial union of Ish and Emma, far ahead of its time for popular fiction, is presented matter-of-factly, as are other questions of race and nationality.) He doesn't explore the consequences of his ideas as rigorously as some later writers in the same subgenre. But Stewart certainly deserves credit for helping to establish one of the most fruitful lines of science fiction. Even more to the point, he wrote a powerful and moving novel that stands up very well over fifty years later. If you first read it years ago, you'll find it well worth rereading. And if the book is new to you—you're in for a treat.

**THE SURVIVAL IMPERATIVE****by William E. Burrows****Forge, \$24.95 (hc)****ISBN: 0-765-31114-3**

This book begins with a fictional meteor cluster striking Earth. Widespread destruction is topped off by a nuclear war between Asian powers that mistake the impacts for an enemy attack. Combined with the atmospheric detritus of the meteor strikes, the fallout reduces human population to a pitiful band of survivors, faced with an uphill battle to escape extinction and rebuild civilization. Sound familiar? This time it's not the lead-in to another post-catastrophe novel, but to a fervent non-fiction plea for a revival and repurposing of the space program.

On a geological time scale, large meteor and comet collisions with our planet occur regularly. Most of us know the widely accepted theory that an impact near present-day Yucatan caused the extinction of the dinosaurs sixty-five million years ago. Even so, the impact scenario that Burrows sketches isn't inevitable. A SpaceWatch program is already looking for Near Earth Objects (NEOs) whose orbits make them candidates to strike our planet, and whose size would cause major damage.

If SpaceWatch discovers a threat, there is no current plan to deal with it. The popular movie scenario of nuking a prospective impactor as it approaches would only break the object into smaller pieces, spreading the destruction over a wider area. In addition, NEOs are often discovered too late for any effective action. Burrows argues that establishing significant human colonies off-planet—in orbit or on the Moon—is the only strategy with a long-term chance of preventing the extinction of our species.

Space flight advocates looked at this idea as long ago as Tsiliovsky, the late nineteenth century Russian

rocket pioneer. In the 1960s, Gerard O'Neill, who founded the Space Studies Institute at Princeton, did extensive research on building large space stations as human habitats. Burrows thinks a simpler answer would be to build permanent bases on the moon, where at least some raw materials are already available. Here again, a fair amount of the preliminary planning has been done; what's lacking is a real commitment to the project.

Burrows has no illusions that today's NASA is up to the job. His summary of how political expediency sapped NASA's momentum after Apollo is sobering. NASA's current program, based on the lame-duck space shuttle, primarily benefits the aerospace industry that maintains and supplies the aging vehicles. And while the Bush administration has announced plans for a return to the moon and a voyage to Mars, there has been no money put into those projects. The funding has been left for future administrations to carry out, if they're interested—and have the money.

On the other hand, China has announced its own moon program, and unlike Western nations driven by the next election or quarterly business cycle, China does have a history of effective long-range planning of projects that carry successfully over generations, from the Great Wall right down to the recent Yangtze dam project.

Burrows concludes with an impassioned plea for the establishment of a permanent international moon colony, large enough to preserve a significant human population—and just as important, the records of our civilization. While it's not always as tightly focused as one might like, this book ought to be required reading for anybody who wants a rationale for the space program that might convince those not already onboard. ○

# SF CONVENTIONAL CALENDAR

With the holidays behind us, it's time to think about getting out and about. Plan now for social weekends with your favorite SF authors, editors, artists, and fellow fans. For an explanation of con(vention)s, a sample of SF folksongs, info on fanzines and clubs, and how to get a later, longer list of cons, send me an SASE (self-addressed, stamped #10 [business] envelope) at 10 Hill #22-L, Newark NJ 07102. The hot line is (973) 242-5999. If a machine answers (with a list of the week's cons), leave a message and I'll call back on my nickel. When writing cons, send an SASE. For free listings, tell me of your con 6 months out. Look for me at cons behind the Filthy Pierre badge, playing a musical keyboard.—Erwin S. Strauss

## JANUARY 2007

5-7—GAFilk. For info, write: 890-F Atlanta #150, Roswell GA 30075. Or phone: (973) 242-5999 (10 AM to 10 PM, not collect). (Web) [gafilk.org](http://gafilk.org). (E-mail) [Info@gafilk.org](mailto:Info@gafilk.org). Con will be held in: Atlanta GA (if city omitted, same as in address) at the Airport Ramada. Guests will include: musicians Urban Tapestry. Science fiction and fantasy folksinging.

12-14—Arisia, Bldg. 600, #322, 1 Kendall Sq., Cambridge MA 02139. [arisia.org](http://arisia.org). Hyatt, Cambridge MA. Big SF/fantasy con.

12-14—RustyCon, Box 27075, Seattle WA 98188. [rustycon.com](http://rustycon.com). Airport Radisson. T. Bisson, R. Alexander

19-21—ConFusion, Box 8284, Ann Arbor MI 48107. [stilyagi.org](http://stilyagi.org). Marriott, Troy MI. General SF/fantasy convention.

19-21—ChattaCon, Box 23908, Chattanooga TN 37422. [chattacon.org](http://chattacon.org). Chattanooga TN. E. Moon, H. Waldrop, B. Higgins.

26-28—VeriCon, Harvard/Radcliffe SF Assn., 4 Univ. Hall, Cambridge MA 02138. [vericon.org](http://vericon.org). Harvard Univ. G.G. Kay

## FEBRUARY 2007

8-11—CapriCon, Box 2862, Chicago IL 60690. [capricon.org](http://capricon.org). Sheraton, Arlington Heights (Chicago) IL. SF/fantasy.

9-11—Nullus Anxietas. [ausdwcon.org](http://ausdwcon.org). Carlton Crest Hotel & Conf. Centre, Melbourne. Australian nat'l. Discworld con.

16-18—Farpoint, 11708 Troy Ct., Waldorf MD 20601. [farpoint.com](http://farpoint.com). Marriott, Hunt Valley (Baltimore) MD. Media SF.

16-18—Boskone, Box 809, Framingham MA 01701. (617) 625-2311. [boskone.org](http://boskone.org). Westin Waterfront, Boston MA. SF.

16-18—Life, the Universe, & Everything, 3146 JKHB, Provo UT 84602. [ltue.byu.edu](http://ltue.byu.edu). BYU campus. SF & fantasy.

16-18—RadCon, 2527 W. Kennewick Ave. #162, Kennewick WA 99336. [shawn-pack@yahoo.com](mailto:shawn-pack@yahoo.com). Pasco WA. SF con.

16-18—VisionCon, Box 1415, Springfield MO 65801. (417) 886-7219. [visioncon.net](http://visioncon.net). Media, gaming, SF and fantasy.

16-18—Gallifrey, Box 3021, North Hollywood CA 91609. [gallifreyone.com](http://gallifreyone.com). LAX Airport Marriott. Big Dr. Who con.

16-18—KatsuCon, Box 7064, Silver Spring MD 20907. [katsucon.org](http://katsucon.org). Omni Shoreham Hotel, Washington DC. Anime.

16-18—StellarCon, c/o SF3, Box I-1, EUC, UNCG, Greensboro NC 27412. [stellarcon.org](http://stellarcon.org). Radisson, High Point NC.

23-25—SheVaCon, Box 416, Verona VA 24482. [shevacon.org](http://shevacon.org). Roanoke VA. Science fiction and fantasy convention.

## MARCH 2007

2-4—CoastCon, Box 1423, Biloxi MS 39533. (228) 435-5217. A general SF and fantasy convention.

2-4—NonCon, Box 3817, Vassar College, Poughkeepsie NY 12604. [noncon.net](http://noncon.net). On campus. Gaming and SF.

9-11—Potlatch, c/o Box 5464, Portland OR 97228. [potlatch@gmail.com](mailto:potlatch@gmail.com). Written science fiction and fantasy.

16-18—LunaCon, Box 432, Bronx NY 10465. [lunacon.org](http://lunacon.org). Hilton, Rye NY. A general SF and fantasy convention.

16-18—MillenniCon, 5818 Wilmington Pike #122, Centerville OH 45459. [millennicon.org](http://millennicon.org). Dayton OH area. SF/fantasy.

23-25—Icon, Box 550, Stony Brook NY 11790. [iconsf.org](http://iconsf.org). State University of New York at Stony Brook. SF/fantasy.

29-Apr. 1—World Horror Con. [whc2007.org](http://whc2007.org). Toronto ON. Michael Marshall Smith, Nancy Kilpatrick, John Picacio.

29-Apr. 2—CostumeCon, c/o Mai, 7835 Milan, St. Louis MO 63130. [cc25.net](http://cc25.net). Masqueraders' big annual meet.

## AUGUST 2007

2-5—Archon, Box 8387, St. Louis MO 63132. [archonstl.org](http://archonstl.org). Collinsville IL. 2007 North American SF Convention. \$90.

30-Sep. 3—Nippon 2007, Box 314, Annapolis Jct. MD 20701. [nippon2007.org](http://nippon2007.org). Yokohama Japan. WorldCon. \$220.

## AUGUST 2008

6-10—DenVention 3, 1245 Allegheny Dr., Colorado Springs, CO 80919. [denver2008.com](http://denver2008.com). Denver CO. WorldCon. \$100



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# NEXT ISSUE

## MARCH ISSUE

Acclaimed British writer **Brian Stableford** returns with a sequel to his visionary novella "The Plurality of Worlds," which ran in the August issue. This time, Sir Francis Drake, but lately returned from a voyage to the Moon in John Dee's ethership, sets out on a seemingly more mundane journey across earthly seas in search of the unknown islands of the South Pacific—but what he finds there, including giant spiders, talking birds, and strangely mutated people is hardly less fantastical than a journey to the Moon, and Drake soon finds himself battling a sinister alien conspiracy that could determine the fate of the human race itself. "Dr. Muffet's Island" is inventive, fanciful, and highly entertaining, so don't miss it!

## ALSO IN MARCH

**Mary Rosenblum**, one of our most popular and prolific contributors, returns with the compelling story of a young man beginning a new life in space who faces challenges and opportunities he never even dreamed of before he turned his face to the "Breeze from the Stars"; **Jim Grimsley** shows us that sometimes it's better *not* to remember what you've forgotten, in the disquieting story of "The Sanguine"; new writer **Deborah Coates** shows us the price of living so that you always have a "Chainsaw on Hand"; British writer **Colin P. Davies** teaches us the value of words in a status-conscious future society, in "Babel 3000"; **Bruce McAllister**, one of the most critically acclaimed writers of the eighties, demonstrates that he hasn't lost his touch by deftly relating the tale of a man who must spend his life wrestling with "The Lion"; and new writer **Matthew Johnson** takes us sideways in time to an evocative alternate world where Unreason wrestles with Reason itself over an issue of "Public Safety."

## EXCITING FEATURES

**Robert Silverberg** bends his considerable powers toward "Resurrecting the Quagga"; **Paul Di Filippo** brings us "On Books"; and **James Patrick Kelly's** "On the Net" column makes an attempt to distinguish between "The Living and the Dead"; plus an array of cartoons, poems, and other features. Look for our March issue on sale at your newsstand on January 30, 2007. Or you can subscribe to *Asimov's*, either by mail, or online, in varying formats, including in downloadable form for your PDA, by going to our website, [www.asimovs.com](http://www.asimovs.com)).

## COMING SOON

cortex-coddling stories by **Lucius Shepard**, **Karen Joy Fowler**, **Allen M. Steele**, **Kit Reed**, **Lisa Goldstein**, **Neal Asher**, **Michael Swanwick**, **Mike Resnick**, **Nancy Kress**, **Gene Wolfe**, **Robert Silverberg**, **Robert Reed**, **Jack McDevitt**, **Jack Skillingstead**, **Elizabeth Bear**, and many others!

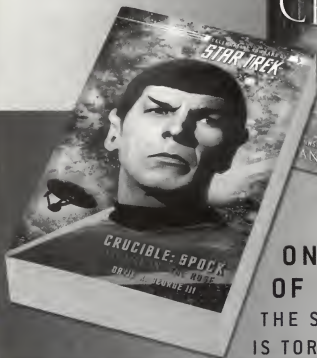
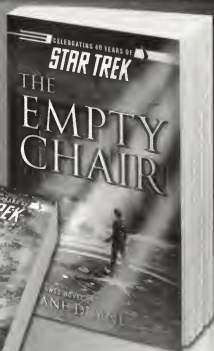
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